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OBSERVATIONS

ON

LIVE STOCK;

CONTAINING

HINTS FOR CHOOSING AND IMPROVING

THE BEST BREEDS

OF THE MOST USEFUL KINDS

OF

DOMESTIC ANIMALS.

BY GEORGE CULLEY,

FARMER, NORTHUMBERLAND.

THE SECOND EDITION, ALTERED AND ENLARGED.

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AUG

TO

THE RIGHT HONOURABLE

JAMES,

EARL OF HOPETOUN,

WHO,

ALONG WITH OTHER RURAL IMPROVEMENTS,

HATH BEEN PARTICULARLY ATTENTIVE

IN SELECTING AND IMPROVING

THE BEST BREEDS

OF THE DIFFERENT KINDS

OF

LIVE STOCK,

THE FOLLOWING PAGES ARE,

WITH THE UTMOST RESPECT,

MOST HUMBLY INSCRIBED,

BY

HIS LORDSHIP's MOST OBEDIENT,

AND

VERY HUMBLE SERVANT,

THE AUTHOR.

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ERRATA.

Page.	Line *(from the bottom.)*	
16, 17, 18		for *three-year old*,—read *three-years old.*
27	last	*potable*,—read *probable.*
46	2	*exceeding*,—read *exceedingly.*
52	15	*fitted*,—read *adapted.*
79	12	*judgements*,—read *judgement.*
167	8	*Trenches*,—read *Frenches.*
207	6	*on*,—read *in.*

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Introduction.

IT has been matter of ſurpriſe to many, that none of our countrymen have hitherto attempted to write a Treatiſe, expreſsly, upon what farmers call Stock; by which are meant, thoſe domeſtic animals, with which our fields, our yards, and ſtables, are, or ought to be, ſtored; ſuch as horſes, neat cattle, ſheep, and ſwine; the knowledge of which is, at this period of improvement, as neceſſary for the farmer as the proper cultivation of a field for wheat, barley, turnips, or any other crop. For, according to the preſent improved ſyſtem of farming, there is ſuch a connection between the cultivation of ground, and breeding,

rearing, and fattening cattle, ſheep, and other domeſtic animals, that a man will make but an indifferent figure in rural affairs, if he does not underſtand the latter as well as the former. Our ſhelves are loaded with volumes that have been written upon Agriculture, while but little has been ſaid upon thoſe very uſeful animals above-mentioned. Conſcious of my own inability to undertake ſo important and neceſſary a taſk, I repeatedly ſolicited ſome of my acquaintance, whom I believed to be well able to perform it; and in particular one, for whoſe abilities I have the higheſt reſpect, whoſe whole life has been employed in breeding and improving ſtock, and who, by long experience, has carried it to very great perfection. But being unable to prevail upon him to undertake the taſk, I ſhall venture to offer my own thoughts to the public, in hopes that they may induce ſome abler perſon to inveſtigate more fully this hitherto unexplored

unexplored branch of rural Science, for the good of mankind, and benefit of my brother breeders.

In the following ſheets I ſhall endeavour to deſcribe the different breeds and varieties of breeds of domeſtic animals, which *have come under my obſervation*, and to point out their good or bad properties, and endeavour to deſcribe the mode of management generally practiſed, where each diſtinct breed is moſt prevalent; and wherever it has occurred, that an advantage could be obtained by adopting or introducing a different breed, I have taken the liberty to recommend it, and to point out what particular breeds were the beſt adapted for particular ſituations; for it muſt be obvious to every perſon of the leaſt obſervation, that the large long-woolled ſheep, which do ſo well upon all the incloſed parts of the iſland wherever they have been tried, are by no means fit for, nor even could they ſubſiſt upon, the cold

heathy mountains of Yorkſhire, Weſtmoreland, Cumberland, Scotland, &c. &c. upon which the black-faced, coarſe-woolled tribe, have, for ſo long a time, been bred, and probably with greater advantage than any other breed we know.

Between theſe two extremes it is probable there are many ſituations, in which neither of the two breeds above-named would be moſt profitable; but, fortunately for the farmer, there are other breeds, and varieties of breeds, which may ſuit his particular ſituation, and be more eligible for him to propagate. To find out this moſt uſeful breed, or variety of breeds, may be eaſily done by any ſenſible farmer, who will make a few experiments, and keep his mind open to conviction; but the greateſt difficulty lies, in perſuading the generality of farmers to lay aſide their prejudices, make ſimilar trials, (fairly conducted) and be guided by the conſequences;

quences; it is this prejudice, which is the bane of all improvements, not only in domeſtic animals, but in every department of agriculture; but which, I hope, will in a few years give way to experimental facts, and the moſt perſuaſive of all reaſons,—ſuperior profits.

A perſon who has travelled through the different breeding counties, cannot but remark, the great diverſity of opinion in the characteriſtic diſtinctions of excellence in domeſtic animals, particularly ſheep: A Norfolk ſheep-breeder ſays, ſheep ſhould be *black-faced* and *black-legged;* that their *horns* ſhould come out *forward*, and turn in ſuch a manner as you can ſee the *ears through*, or *behind*, the *circle of the horns.*—A Wiltſhire ſheep-breeder, on the contrary, ſays, that ſheep ſhould have *white faces* and *white legs;* and that their *horns* ſhould come out *backwards*, in ſuch a manner, that the *ears* may be ſeen *before the horns.*—But a Suſſex breeder inſiſts upon it that they

are both wrong; becauſe ſheep ſhould be *grey-faced* and *grey-legged*, and have *no horns*.—Thus it appears how widely different theſe worthy people are in their opinions; and yet they cannot all be right, though they moſt aſſuredly think ſo.

Could any of theſe people be prevailed upon to make an experiment, they would moſt probably find, that excellence does not depend on the *ſituation* or *ſize* of *horns*, or on the colour of *faces* and *legs*, but on other *more eſſential properties*; and that the reſult of ſuch experiments would be, a conviction that there were other breeds of ſheep, better adapted to their ſituation, and more profitable than the breed they had been in poſſeſſion of for ſo many years.

But it is curious to obſerve, in general, how highly ſatisfied and convinced each ſeparate diſtrict is of having the *beſt ſtock*; for, according to the vulgar phraſe, every diſtinct county has "*the beſt in England.*"

England." Self-ſatisfied with this contracted idea, they reſt contented without a wiſh for further improvement, until ſome one adventurer, of a more enterprizing ſpirit than his neighbours, makes his way into a diſtant part of the kingdom, where he unexpectedly is ſtruck with a breed of neat cattle, ſheep, &c. ſuperior to any at home, or that he had ever ſeen before; after a proper conſideration, he buys or hires ſome of theſe, benefits himſelf and the neighbourhood where he lives by the introduction of a more valuable breed of animals than they had hitherto been acquainted with, which, by degrees, ſpread themſelves through the country.

It will be neceſſary here to obſerve, that there are ſome parts of the kingdom I have never had an opportunity of viſiting; particularly Shropſhire, Suſſex, Devonſhire, Cornwall, and a great part of Wales. But I can aſſure my readers, that I have repeatedly viſited moſt of the

other breeding diſtricts in the iſland; eſpecially Lincolnſhire, Leiceſterſhire, and the adjoining midland counties, where I apprehend the beſt and moſt profitable kinds of ſheep are bred, and where the breeders have been at more pains than thoſe of any other diſtrict.—Amongſt theſe attentive breeders I have ſpent weeks and months in different years, and uſed every fair means to gain information of the moſt approved practices of breeding.—Theſe practices, for many years, I have purſued in the counties of Durham and Northumberland with great ſucceſs; and the breeders in theſe northern counties and the borders of Scotland, now and for a number of years, have adopted and followed the Diſhley breed, with an avidity that is perhaps the beſt proof of its ſuperiority.

The great obſtacle to the *improvement* of domeſtic animals ſeems to have ariſen from a common and prevailing idea amongſt breeders,—that no bull ſhould be

be uſed in the ſame ſtock more than three years, and no tup more than two; becauſe, (ſay they) if uſed longer, the breed will be *too near a-kin*, and the produce will be *tender*, *diminutive*, and liable to *diſorders*; ſome have imbibed the prejudice ſo far as to think it *irreligious*; and if they were by chance in poſſeſſion of the beſt breed in the iſland, would by no means put a male and female together that had the ſame ſire, or were out of the ſame dam.

But, fortunately for the public, there have been men, in different lines of breeding, whoſe enlarged minds were not to be bound by vulgar prejudice, or long-eſtabliſhed modes, and who have proved, by many years experience, that ſuch notions are without any foundation.

Mr Bakewell has not had a croſs (from any other breed than his own) for upwards of 20 years: His beſt ſtock has been bred by the neareſt affinities; yet they

they have not decreaſed in ſize, neither are they leſs hardy, or more liable to diſorders; but, on the contrary, have kept in a progreſſive ſtate of improvement.

This mode has alſo been frequently practiſed in breeding the beſt dogs and game-cocks.—A certain gentleman, who produced the beſt pointers in the north of England for many years, never bred from any other than his own; becauſe, he ſaid, he could not find better to croſs them with.—And I am informed, from good authority, that a breeder of game-cocks, who was very ſucceſsful, would never allow his breed to be contaminated by croſſing with others; and to this precaution he attributed all his ſuperiority.

But one of the moſt concluſive arguments that croſſing with different ſtock is not neceſſary to ſecure ſize, hardineſs, &c. is the breed of wild-cattle in Chillingham-Park, in the county of Northumberland. It is well known theſe cattle have

have been confined in this park for ſeveral hundred years, without any intermixture; and are perhaps the *pureſt breed* of cattle of any in the kingdom. From their ſituation and uncontrouled ſtate, they muſt indiſputably have bred from the neareſt affinities in every poſſible degree; yet we find theſe cattle exceeding hardy, healthy, and well formed, and their ſize as well as colour, and many other particulars and peculiarities, the ſame as they were 500 years ſince.

From theſe inſtances it appears there can be *no danger* in breeding by the neareſt affinities, provided they are poſſeſſed in a *ſuperior degree* of the qualities we wiſh to acquire; but if not poſſeſſed of theſe, then we ought to procure ſuch of the ſame kind as have, in the moſt eminent degree, the valuable properties we think our own deficient in. It is certainly from the *beſt males and females* that *beſt breeds* can be obtained or preſerved; to breed in this manner is undoubtedly

doubtedly right, ſo long as *better males* can be met with, not only amongſt our neighbours, but alſo amongſt the moſt *improved breeds* in any part of the iſland, or from any part of the world, provided the expence does not exceed the propoſed advantage. And when you can no longer, at home or abroad, find *better males* than your own, then, by all means, breed from them; whether horſes, neat-cattle, ſheep, &c. for the ſame rule holds good through every ſpecies of domeſtic animals: But, upon no account, attempt to breed or croſs from *worſe* than your own; for that would be acting in contradiction to common-ſenſe, experience, and that well-eſtabliſhed rule—"*That beſt only can beget beſt;*" or, which is a particular caſe of a more general rule, viz. That "*Like begets like.*"

On this ſimple axiom the whole myſtery of improving ſtock ſeems to depend, and, like many other valuable truths, has been neglected, moſt probably for its

its ſimplicity; and other modes purſued as whim or fancy directed, without either reaſon or experiment to ſupport, or even give the leaſt colour of plauſibility to the practice.

I find the farmers, in moſt breeding countries, complain of their old breed being loſt, or at leaſt much worn out. That there may be ſome truth in theſe complaints, I will not deny: But perhaps there may be other reaſons, which in ſome meaſure contribute to lead people into this way of thinking. In this age of improvement, I apprehend we examine more narrowly; we diſtinguiſh with more perſpicuity, and conſequently we judge more accurately. We are not content now with judging by one of our ſenſes, (as I believe uſed to be the caſe) by looking only; but we now join the ſenſe of feeling to ſeeing: The farmer or breeder of this day is not aſhamed to learn from the butcher, to feel with his fingers,—that touchſtone of know-

ledge

ledge in regard to judging of animals, already prepared, or to be prepared, for the ſhambles: We, undoubtedly, firſt judge by the ſight; which, being pleaſed, we bring the ſenſe of feeling to its aſſiſtance; and if this alſo approves, we then conclude that the animal ſuits our purpoſe, or is anſwerable to the idea we have formed of it.*

From

* A nice or good judge of cattle and ſheep, with a ſlight touch of the fingers upon the fatting points of the animal, viz:—the hips, rumps, ribs, flank, breaſt, twiſt, ſhoulder-ſcore, &c. will know immediately whether it will make fat or not, and in which part it will be the fatteſt.—I have often wiſhed to convey in language that idea or ſenſation we acquire by the touch, or feel of our fingers, which enables us to form a judgment when we are handling an animal intended to be fatted, but I have as often found myſelf unequal to fulfil that wiſh.—It is very eaſy to know where an animal is fatteſt which is already made fat, becauſe we can evidently feel a ſubſtance or quantity of fat, upon all thoſe parts which are denominated the fatting points; but the difficulty is, to explain how we know or diſtinguiſh animals in a lean ſtate, which will make fat, and which will not, or rather which will make fat in ſuch and ſuch points or parts, and not in others; which a perſon of judgment *(in practice)* can tell, as it were, inſtantaneouſly: I ſay *in practice;* becauſe, I believe,

From theſe, and ſuch like reaſons, I have been induced to believe that breeders and graziers are miſled or miſtaken, at leaſt in a great meaſure, reſpecting the breeds of cattle, ſheep, &c. being loſt; and of thoſe animals, being worſe now than formerly. The fact I apprehend is, that from our more atten-

lieve, that the beſt judges *out of practice* are not able to judge with preciſion, at leaſt I am not.—We ſay this beaſt *touches* nicely upon its ribs, hips, &c. &c. becauſe we find a mellow, pleaſant feel on thoſe parts: But we do not ſay ſoft; becauſe there are ſome of this ſame ſort of animals which have a ſoft looſe handle, of which we do not approve, becauſe, though ſoft and looſe, have not that mellow feel above-mentioned: For, tho' they both handle looſe and ſoft, yet we know that the one will make fat, and that the other will not; and in this lies the difficulty of the explanation; we clearly find a particular kindlineſs, or pleaſantneſs, in the feel of the one, much ſuperior to the other, by which we immediately conclude, that this will make fat, and the other not ſo fat; and in this a perſon of judgment, and *in practice*, is very ſeldom miſtaken. I ſhall only make one more remark, which is, that though the one animal will make remarkably fat, and the other will ſcarce improve at all, with the ſame keeping; yet between theſe extremes are numberleſs gradations, which the complete judge can diſtinguiſh with wonderful preciſion.

tive

tive obſervations, we are become worſe to pleaſe; and if matters go on in the right line, we ſhall every day become nicer and clearer in our judgments of ſtock, as well as other things.

Domeſtic animals, at different ages, being called or known by different names, in different parts of the kingdom, it may not be amiſs to note a few of the principal diſtinctions:—

A *ſtone-horſe*, or *ſtallion*, is the name by which the full-grown male of the horſe kind is diſtinguiſhed.—Whilſt ſucking, he is a *colt-foal*; then a *yearling colt*; afterwards a *two* or *three-year-old colt*, until *four*, when they are moſt commonly called *horſes*.

The female is called a *mare*; when ſucking, a *mare* or *filly-foal*; then a *yearling filly*; afterwards, a *two* or *three-year-old filly*; and at *four*, becomes a *mare*.

The

The general name of the male in neat-cattle is *bull;* during the time he ſucks, he is called a *bull-calf*, until turned of a year old, when he is called a *ſtirk* or *yearling-bull;* then a *two*, *three*, or *four-years-old bull*, until *ſix*, when he is *aged*:—But when caſtrated or gelt, he is called an *ox*, or *ſtot-calf*, until a year old, when he is called a *ſtirk*, *ſtot*, or *yearling*, then a *two-year-old ſteer*, and in ſome places, a *twinter;* at *three*, he is called a *three-year-old ſteer;* and at *four*, he firſt takes the name of *ox* or *bullock*:—Though formerly, I believe, the caſtrated male was not called an *ox* or *bullock*, until *ſix* years old,* when he is looked upon to be at the beſt, tho' ſome people think an ox improves until *ſeven*, *eight*, or even *nine* years old.

The general name of the female of this kind is *cow;* when ſucking the dam,

* I apprehend the taking the name of *ox* or *bullock*, at *four* inſtead of *ſix* years old, has taken place ſince the drawing or working of oxen has been ſo much diſuſed.

ſhe is called a *cow-calf*; then a *yearling quey*, or *heifer*, or *twinter*; the next year, a *three-year-old quey*, or *heifer*; and when *four*, ſhe is firſt called a *cow*, which name is retained till the laſt: If caſtrated or ſpayed, ſhe is called a *ſpayed* or *cut heifer*, or *ſpayed* or *cut quey*, in the north parts of this iſland.

The general name by which the male ſheep are known, is *ram* or *tup*: When lambs, they are called *ram* or *tup-lambs*, as long as they ſuck; from weaning, or taking from the ewes, to the ſhearing or clipping for the firſt time, they are called *hogs*, or *hoggerels*, or *lamb-hogs*; then they take the name of *ſhearing*, *ſhearling*, *ſhear-hog*, or *dinmond-tups*, or *rams*; after that, according to the year they are clipped or ſhorn, they are called *two-ſhear*, *three-ſhear*, and ſo on, which always takes place from the time of ſhearing: But when gelt or caſtrated, they are called *wether-lambs* while ſucking; then *wether-hogs*, until ſhorn or clipped, when they take

take the name of *ſhearings*, &c. until they are ſhorn a ſecond time, when they are *young wethers*, or *two-ſhear wethers*; then *three* or *four-ſhear wethers*, or more, according to the times they are clipped or ſhorn.

The general name by which the female ſheep are known is *ewe*; while ſucking, they are called *ewe-lambs*, or *gimmer-lambs*; but when weaned, or taken from the dams, they are called *ewe-hogs*, or *gimmer-hogs*, until clipped or ſhorn, for the firſt time, when they take the name of *gimmers*; which name continues only one year, until they loſe their fleeces a ſecond time, when they obtain the name of *ewes*, which they retain as long as they live; only every time they are ſhorn, they add a year to their age, and are called *two-ſhear*, *three-ſhear*, or *four-ſhear ewes*, according to the times they have been clipped or ſhorn; and this holds good of all other ſheep; for the age of ſheep is not reckoned from the

time they are lambed, but from the time of ſhearing; for altho' a ſheep is generally 15 or 16 months old when firſt ſhorn, yet they are not called *ſhearings* until once clipped, which is underſtood to be the ſame as one year old.

What we call *gimmers* in the North, in many of the midland parts of England are called *theaves;* and when twice ſhorn, *double-theaves.*—There are other variations of names, in different parts, which I do not recollect.—In ſome places they call the male lambs *heeders*, and the females *ſheeders;* and in others, *hogs* are called *tegs*, and two-year-old ewes, *twinters*, and three-year-olds, *thrunters.*

Of the pig-tribe, the male is called a *boar* or *brawn;* the female, a *ſow;* the cut or caſtrated female, a *gilt* or *gaut.*—In the ſouthern parts, pigs are in general called *hogs;* and in the northern parts, they are frequently called *ſhots*, after being weaned.—*Pigs* or *ſwine* are common names for the whole tribe.

HORSES.

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HORSES.

21. 1. 18.

THIS ſpecies of domeſtic animals being univerſally allowed to be of great ſervice to mankind in general, and the farmer in particular, we ſhall give them the firſt place in our arrangement; and whatever be the variety, their form ſhould anſwer the following

DESCRIPTION OF A HORSE.

His head ſhould be as ſmall as the proportion of the animal will admit; his noſtrils expanded, and muzzle fine; his eyes chearful, and prominent; his ears ſmall, upright, and placed near together; his neck, riſing out from between his ſhoulders with an eaſy tapering curve,

muſt join gracefully to the head; his ſhoulders, being well thrown back, muſt alſo go into his neck (at what is called the points) unperceived, which perhaps facilitates the going much more than the narrow ſhoulder;* the arm, or fore thigh, ſhould be muſcular, and, tapering from the ſhoulder, meet with a fine ſtraight, ſinewy, bony leg; the hoof circular, and wide at the heel; his cheſt deep, and full at the girth; his loin or fillets broad and ſtraight, and body round,; his hips or hooks, by no means wide, but quarters long, and tail ſet on, ſo as to be nearly in the ſame right line as his back; his thighs ſtrong and muſcular; his legs clean, and fine-boned; the leg-bones not round, but what is called lathy, or flat.

* Whoever has obſerved a greyhound or a hare, will perceive how very wide they are made at the upper part of the ſhoulders, and there are few animals that move with ſo much eaſe and ſwiftneſs.

It

It is generally thought that we only have TWO original breeds of horſes in this iſland, viz. the race or blood kind, and the black cart-breed: The reſt have been ſuppoſed to be only variations from theſe two by repeated croſſings; and yet we are ſtruck with ſurpriſe, when we conſider the difference between the gigantic dray-horſe, 18 hands high, ſtalking upon the London pavements, and the ſmall Highland, or Shetland poney, tripping over the moſſes with a heavy load, tho' not more than nine hands, or 36 inches high, when at its full growth.—From the ſize and form of theſe ponies, we are inclined to believe, that there are at leaſt *three* diſtinct breeds of horſes, viz:—The racers, the heavy blacks, and the Shetland ponies.

The breed of horſes to whoſe improvement the greateſt attention has been paid, is the racing or blood kind, of which I ſhall decline ſaying any thing about; 1*ſt*, becauſe I know very little

concerning them; and, 2*dly*, becauſe I think farmers ought to have little more to do with them, than occaſionally putting a good mare to a ſtrong well-proportioned blood-horſe, by way of mixing a little blood amongſt our chapmen or riding horſes. Perhaps, for ſome particular uſes, even a plough-horſe may not be worſe, for having a little blood in him, as it is termed; and every man, who has been much accuſtomed to ride different breeds of horſes, will ſoon diſcover, that a horſe which has a little blood in him, will uſually perform a pleaſanter day's work, than one that is not related to the racing breed;* and it is probably

* Objections have been made by late writers to croſſing of breeds of animals; I cannot help being of a different opinion with regard to HORSES; becauſe, from many years experience, I have much reaſon to believe, that great improvements have been, and may be, made by croſſing, amongſt the different breeds of horſes; and, I apprehend, it is from theſe croſſes, *properly made*, that this iſland has been long famous for ſuch a noted and excellent breed of hunters and ſaddle-

probably from this cauſe that the *Yorkſhire draught horſes*, and particularly the

CLEVELAND BAYS,

are ſo juſtly eſteemed for their great exertions in the coal and lime ſeaſon; the weights carried, diſtance travelled, and the time it is performed in for ſeveral weeks together, are certain proofs of their activity, ſtrength, and hardineſs:*

ſaddle-horſes, inſomuch that great numbers are yearly bought up for France and other parts of the Continent.—If croſſing was not of uſe, why ſhould the gentlemen of the turf have been at the trouble and expence of procuring ſtallions from Arabia, Turkey, &c.? The well-atteſted pedigrees of moſt of our racers generally terminate with a Burton Barb, or Place's White Turk, &c.; a proof that this practice has been attended with ſucceſs.—But I am told, that few or no Arabian or foreign ſtallions have been imported of late years; the breeders of race-horſes finding they can now make more improvement, by breeding from the beſt Engliſh horſes;—a certain proof what attention will do, when joined with judgment and experience, and a laudable example to the breeders of other kinds of ſtock.

* Three horſes carry a ton and a half of coals, travel 60 miles in 24 hours, without any other reſt than two or three baits upon the road, and frequently perform this four times a week.

Their

Their colour is moſtly bay, and their form is ſuch, that the mares, put to a full-blood ſtallion, breed excellent hunters and ſaddle-horſes; and to a half-blood horſe, capital coachers, or carriage-horſes.

The breed of ſaddle-horſes is confined in a great meaſure to Yorkſhire, Durham, and Northumberland; the Eaſt-Riding of Yorkſhire has been long eminent in that line. The annual fairs held at Northallerton, Howden, and York, exhibit the largeſt ſhows of theſe uſeful creatures: Perhaps it may be owing to this that Yorkſhiremen are in general called *jockeys*, or *knowing hands* in regard to horſes; and indeed you will ſcarce meet with a farmer in that county, eſpecially in the low part of it, who is not well ſkilled in them.

Since bay and other light-going horſes, have been preferred to the black breed for carriages, the Yorkſhire breeders have gone ſo much upon theſe, that the old breed

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breed of riding or ſaddle-horſes, are much worn out. This is owing, perhaps, not only to the greater demand for the latter, but alſo to the coach-horſes, being a ſtronger and larger breed; ſo that if they happen, from blemiſhes, not to anſwer for the harneſs, they ſuit for the plough or cart, while the ſaddle-horſe, from the ſame misfortunes, is rendered, in a great meaſure, uſeleſs.

In moſt parts of the county of Suffolk we meet with a very uſeful breed of horſes for the farmer, particularly in that part which is generally called High Suffolk, from which they have obtained the name of

SUFFOLK PUNCHES;

are in high eſtimation for ploughing and carting, and ſold at greater prices than moſt other draught horſes of their ſize, (for I remember ſeeing few above fifteen and a half hands high). It is

ptobable

probable their merit conſiſts more in conſtitutional hardineſs than true ſhape, being in general a very plain made horſe; their colour moſtly yellowiſh or ſorrel, with a white ratch or blaze on their faces; the head large, ears wide, muzzle coarſe, fore-end low, back long, but very ſtraight, ſides flat, ſhoulders too far forward, hind quarters middling, but rather high about the hips, legs round and ſhort in the paſterns, deep bellied, and full in the flank; here, perhaps, lies much of the merit of theſe horſes, for we know from obſervation and experience, that all deep-bellied horſes carry their food long, and conſequently are enabled to ſtand longer and harder day's works;—hence the old Scotch proverb,

"A *horſe* with a wame,
"And a *mare* with nane."

However, certain it is, that theſe horſes do perform ſurpriſing day's works; it is well

well known that the Suffolk and Norfolk farmers plough more land in a day than any other people in the iſland, and theſe are the kind of horſes every where uſed in thoſe diſtricts.*

The CLYDESDALE HORSES

are probably as good and uſeful a draught horſe as any we are poſſeſſed of; they are larger than the Suffolk Punches, being from 15 to 16½ hands high, ſtrong, hardy, and remarkably true pullers, a reſtive horſe being rarely found amongſt them: In point of ſhape, they are in general plain made about the head, ſides, and hind-legs; they

* A ſtallion and a few mares of this breed were introduced into Scotland by the Earl of Hopetoun, and it gave me great pleaſure to be informed by his Lordſhip's groom, that both they and their progeny anſwer extremely well.—This worthy Nobleman is never ſo happy as when he can introduce any thing that will benefit his tenants, neighbours, and country.

are moſtly of a grey or brown colour, and are ſaid to have been produced by a croſs betwixt the mares of the common Scotch kind, and ſix coach-horſes, (all ſtallions) brought from Flanders by a Duke of Hamilton, about 100 years ſince.

The heavy BLACK-HORSES

are almoſt univerſally bred through the midland counties, particularly Leiceſterſhire, Warwickſhire, Staffordſhire, and Derbyſhire. It is the univerſal cuſtom in thoſe diſtricts, for the farmers to uſe mares only for labour: theſe are all put to the horſe, the male produce of which ſupply the army, London, and moſt of the ſouth and weſtern counties, with horſes for their farming-teams. The largeſt go to the capital for dray-horſes; the next ſupply the farmers in the ſouthern counties, for their waggons, ploughs, &c. and the reſt mount our cavalry, or are trained for carriages, while a few of the

the choiceſt are very properly preſerved for ſtallions.

The vanity of many of the farmers in the South, in regard to their teams, is moſt extraordinary. I have, in Berkſhire and that neighbourhood, ſeveral times met a narrow-wheel'd waggon, with ſix ſtallions, one before another; the firſt horſe, beſides having on a huge bridle, covered with fringe and taſſels, enough to half-load a common Yorkſhire cart-horſe, has ſix bells hung to it, the next five, and ſo on to the laſt, which has only one; and it is really diverting to ſee with what a conceited air the driver ſtruts and brandiſhes his long whip.—A ſtrange contraſt this with the poor Highlander carting home his peats with winter-fuel, when frequently both horſe and cart are not of the ſame value as the harneſs uſed to a Berkſhire waggon-horſe! The reader will not be ſurpriſed, when I aſſure him, that I have in Scotland many

times

times ſeen a horſe and cart conveying peats or turves, when the whole apparatus contained neither iron, leather, nor hemp. The collar or braham was made of ſtraw, the backband of plaited ruſhes, and the wheels of wood only, without buſh of metal, or binding of iron.

One of the Earls of Huntingdon, returning from an embaſſy to the States-General, brought home with him a ſet of coach-horſes of the black breed from the Continent. Moſt of theſe being ſtallions, he with ſome difficulty prevailed upon his tenants by the Trent-ſide, to put their mares to them; which croſs anſwered ſo well, that the breed in that neighbourhood has been in the greateſt repute ever ſince. This, many years afterwards, induced Mr Bakewell, and Mr George Salſbury, to croſs the German Ocean in ſearch of horſes and mares, to improve the Engliſh breed; and after much labour and expence, they returned with half-a-dozen Dutch

or

or Flanders mares. Mr Bakewell ſays, that he never met with a man but he could have prevailed upon him to part with his ſtock for money, except in Holland, where he met with a Dutch boor, who would not ſell one of his mares for any price he could offer; and any body who knows the above great breeder, will be ſenſible that he would not pinch for price, who gave above ſeventy guineas, when beginning buſineſs, for a cart-mare to breed from. Tho' theſe Dutch mares were of uſe in improving the Leiceſterſhire black breed, yet it perhaps ſcarce anſwered the end propoſed; becauſe, by this time, the heavy unweildy black horſes were growing into diſrepute; the nobility and gentry had begun to run bay horſes in their carriages, and light horſes were more uſed in the army; for drays and waggons, the heavy blacks yet are, and probably long will be, a valuable breed. But the preſent ſyſtem of farming requires horſes of

more mettle and activity, better adapted for travelling, and more capable of enduring fatigue, than thoſe above-mentioned. It is long ſince I was told by the Cleveland farmers, that the black horſes could not ſtand the work, nor go at the rate, of their own country horſes; that whenever they were put paſt their pace, they greaſed, and frequently went blind. Yet it is in this induſtrious part of Yorkſhire, and in Norfolk,* Suffolk, &c. that we muſt look for farming horſes able to go through fatigue and hardſhip, able to walk at a pace that the others cannot, and able to work ſix days in every week in the year. It is a well-known fact, that theſe will, upon an average, wear as long again as the rough fleſhy-legged black breed.

* The Norfolk farmers could not ſow from two to four hundred acres of turnips upon one farm, in proper time, in the ſame ſeaſon, and plough from two to near three acres per day, with one pair of horſes, if they had them not from a hardier and nimbler breed than thoſe alluded to.

The

The beſt and hardieſt horſes for the draught I ever remember to have ſeen, proceeded from a croſs between the country mares by the Tees' ſide, and a ſtallion brought from Holſtein: They are not tall horſes; riſing only from about fourteen hands three inches, to fifteen hands three inches; exceedingly ſtrong made, with ſhort clean-boned legs, very firm carcaſes, and equal to any fatigue.

The WELCH HORSES

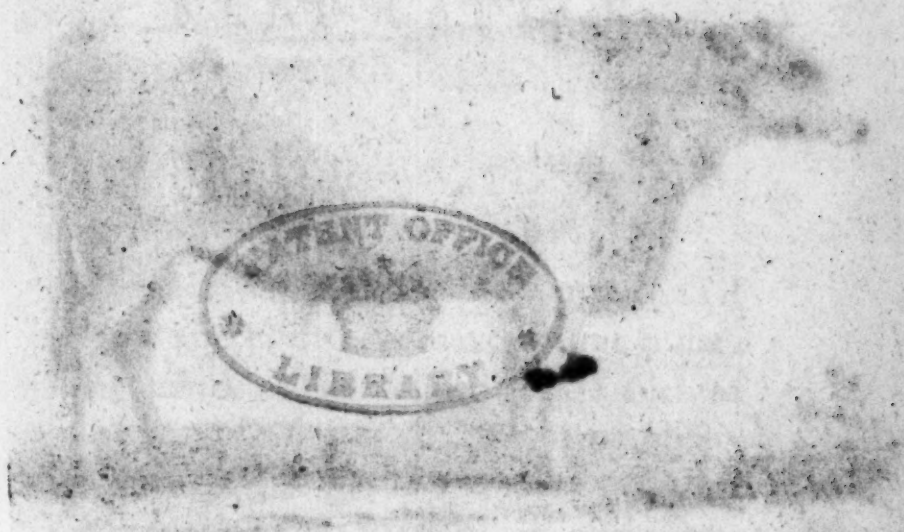
are a very hardy breed, but rather ſmall for the team; but where they are good goers, few or none can equal them for the road; none ſtand our turnpikes like them: And I well remember one, that I rode for many years, which, to the laſt, would have gone upon a pavement by choice, in preference to ſofter road.

The SCOTCH HORSES,

like the Welch, are exceedingly hardy,

but too ſmall for the draught, except the Clydeſdale horſes, &c. taken notice of before. Thoſe properly called gallo-ways, are now rarely to be met with, from an inexcuſable inattention to the breed, which is nearly loſt. From their name, we may ſuppoſe, they originated in the county of Galloway; and it is generally ſaid was owing to croſſing with the Spaniſh horſes, when a part of their *invincible* armada was ſhip-wrecked upon thoſe rocky coaſts. There is much probability in the account; but whether true or not, is not ſo material, as the loſs of ſo valuable a breed of little horſes is to be lamented.

NEAT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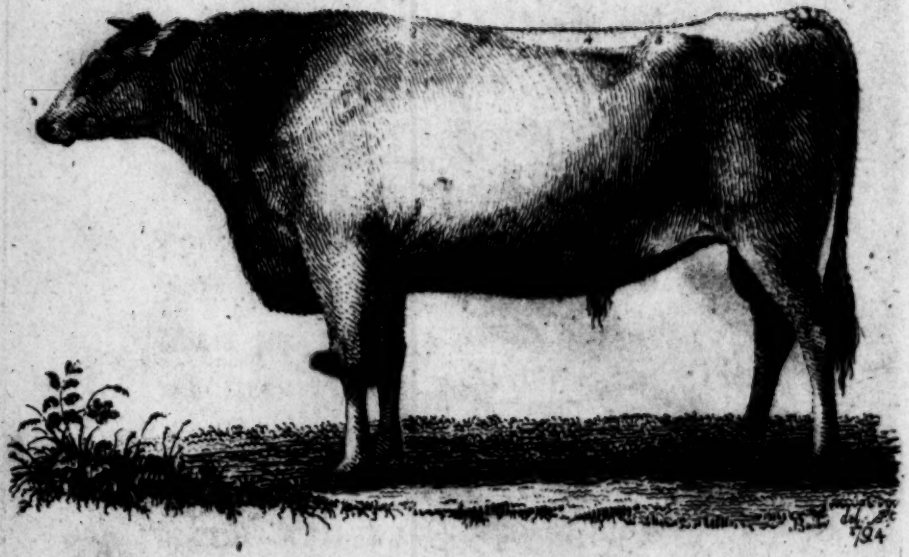

A BULL,
of the short horn'd Breed.

Pa: 37

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NEAT CATTLE.

OF this ſpecies of domeſtic animals I apprehend we have ſeveral different breeds: The following are ſuch as have come either under my own obſervations, or been procured from the communications of friends, or other undoubted authorities, and which are arranged as follows:—

1ſt. The Short-horned; including the varieties of the Dutch and Devonſhire breeds.

2d. The Long-horned, or Lancaſhire breed.

3d. The Polled, humbled, or Galloway breed; including the variety of the Suffolk duns.

4th. The Kyloes, or Scotch breed.

5th. The Alderney, or French breed.

6th. The Wild breed.

But whatever be the kind, I preſume, that to arrive at excellence, there is one form or ſhape eſſential to all, which form I ſhall attempt to give in the

DESCRIPTION OF A BULL.

The head of the Bull ſhould be rather long, and muzzle fine; his eyes lively and prominent; his ears long and thin; his horns white; his neck, riſing with a gentle curve from the ſhoulders, and ſmall and fine where it joins the head; his ſhoulders moderately broad at the top, joining full to his chine* and cheſt

* In ſome places this part is called the crops.

backwards,

backwards, and to the neck-vein, (1)* forwards; his boſom open; breaſt broad, and projecting well before his legs; his arms or fore thighs muſcular, and tapering to his knee; his legs ſtraight, clean, and very fine-boned; his chine (2) and cheſt ſo full as to leave no hollows behind the ſhoulders; the plates (3) ſtrong, to keep his belly from ſinking below the level of his breaſt; his back or loin (4) broad, ſtraight, and flat; his ribs, riſing one above another, in ſuch a manner that the laſt rib ſhall be rather the higheſt, leaving only a ſmall ſpace to the hips (5) or hooks, the whole forming a round or barrel-like carcaſe; his hips ſhould be wide placed, round or globular, and a little higher than the back; the quarters (from the hip to the rump) long, and inſtead of being ſquare,

* Some parts of cattle being called by different names, in different places, theſe figures refer to the annexed plate, for the purpoſe of explanation.

as recommended by ſome, they ſhould taper gradually from the hips backward, and the turls or pott-bones (6) not in the leaſt protuberant; rumps cloſe to the tail; the tail broad, well haired, and ſet on ſo high as to be in the ſame horizontal line with his back.

The Short-horned, or DUTCH Kind,

differ from the other breeds in the ſhortneſs of their horns, and in being wider and thicker in their form or mould, conſequently feed to the moſt weight, in affording by much the greateſt quantity of tallow when fattened, in having very thin hides, and much leſs hair upon them than any other breed (Alderneys excepted); but the moſt eſſential difference conſiſts in the quantity of milk they give beyond any other breed;* the

* There are inſtances of cows giving 36 quarts of milk per day, and of 48 firkins of butter being made from a dairy of 12 cows; but the more general quantity is 3 firkins per cow in a ſeaſon, and 24 quarts of milk per day.

great

great quantity of milk, thinneſs of their hides, and little hair, is probably the reaſon why they are tenderer than the other kinds, Alderneys excepted.

It is ſaid of this kind, and I ſuppoſe very juſtly, that they eat more food than any of the other breeds; nor ſhall we wonder at this, when we conſider, that they excel in thoſe three valuable particulars, viz. in affording the greateſt quantity of beef, tallow, and milk.—Their colours are much varied; but the generality are red and white mixed, or what the breeders call *flecked;* and, when properly mixed, is a very pleaſing and agreeable colour.

There are many reaſons for thinking this breed has been imported from the Continent.—Firſt, becauſe they are ſtill in many places called the *Dutch breed.* Secondly, becauſe we find very few of theſe cattle any where in this iſland, except along the eaſtern coaſt, facing thoſe parts of the Continent where the ſame kind

kind of cattle are ſtill bred, and reaching from the ſouthern extremity of Lincolnſhire to the borders of Scotland. The long horns and theſe have met upon the mountains which ſeparate Yorkſhire from Lancaſhire, &c. and, by croſſing, have produced a mixed breed, called *half long-horns*; a very heavy, ſtrong, and not unuſeful kind of cattle; but we do not find that the one kind have ſpread further Weſt, nor the others further Eaſt. But, thirdly, I remember a gentleman of the county of Durham, (Mr Michael Dobinſon) who went in the early part of his life into Holland in order to buy bulls; thoſe he brought over were of much ſervice in improving the breed; and this Mr Dobinſon and neighbours, even in my day, were noted for having the beſt breed of ſhort-horned cattle, and ſold their bulls and heifers for very great prices. But afterwards, ſome other perſons of leſs knowledge going over, brought home ſome bulls, that in all probability

probability introduced along that coaſt the diſagreeable kind of cattle, well known to the breeders adjoining the river Tees, by the appellation of *lyery*, or *double-lyered*; that is, black-fleſhed; for, notwithſtanding one of theſe creatures will feed to a vaſt weight, and tho' fed ever ſo long, yet will not have one pound of fat about it, neither within nor without,* and the fleſh (for it does not deſerve to be called beef) is as black and coarſe-grained as horſe fleſh. However, by the pains and attention of breeders, this uſeleſs diſagreeable variety is now pretty well out of the country; no man will buy one of this kind, if he knows any thing of the matter; and if he

* I once ſaw a beaſt of this ſort killed, which, after feeding all Summer, had not a pound of fat inſide nor out; but it was one of the compleateſt of the kind I ever ſaw: Its two ends, viz. ſhoulders and buttocks, were heavy, round, and coarſe, without any hip-bones at all ſtanding up, and the body quite ſmall; in ſhort, it was more like an ill-made black horſe, than an ox or a cow.

ſhould

ſhould be once taken in, he will remember it well for the future; people converſant with cattle very readily find them out, by their round form all over, particularly their buttocks, which are turned like a black coach-horſe, and the ſmallneſs of their tail. But they are beſt known to the graziers and dealers in cattle, by the feel or touch of the fingers; indeed it is this nice touch or feel of the hand, that in a great meaſure conſtitutes the judge of cattle.

This breed, like moſt others, is better and worſe in different diſtricts; not ſo much, I apprehend, from the good or bad quality of the land, as from a want of attention in the breeders. In Lincolnſhire,* (which is the fartheſt South

* In a journey through Lincolnſhire in 1784, I was happy to find that many ſenſible breeders had improved their breed of ſhort-horned cattle very much, (ſince my viſiting that fine country ten years before) by good bulls and heifers, brought from the counties of Durham and York,

on

South that we meet with any number of this kind of cattle) they are, in general, more ſubject to lyer or black fleſh, than thoſe bred farther North; and in that rich part of Yorkſhire called Holderneſs, they are much the ſame as thoſe South of the Humber, of which we have been ſpeaking. It is probable that they had either ſtuck more to the lyery black-beefed kind, than their more northern neighbours, at that unfortunate period when they were imported from the Continent, or that the latter had ſeen their error ſooner. But from whatever cauſe this happened, it is a fact, that as ſoon as we croſs the Yorkſhire Wolds northward, we find this breed

on both ſides the Tees, where the beſt are confeſſedly bred. In another excurſion in 1789, I met with a Mr Tindale, of ——, near Sleaford, who has the beſt breed of cattle that I ever ſaw in that county, and, perhaps, inferior to few in any part of the kingdom. I was ſhewn an ox (near Lincoln) of his breed, that for true form and nice handling, exceeded any bullock I ever remember to have ſeen.

alter

alter for the better; they become finer in the bone, in the carcaſe, and, in a great meaſure, free from that diſagreeable lyery ſort which has brought ſuch an odium upon this (perhaps) *moſt valuable breed.* When you reach that fine country on both ſides the river Tees, you are then in the center of this breed of cattle; a country that has been long eminent for good ſtock of all kinds; the country where the Dobinſons firſt raiſed a ſpirit of emulation amongſt the breeders, which is ſtill kept up by Mr Hill, the Mr Charges, the Mr Collins, Mr Maynard, &c. &c.

The object of extraordinary *large ſize* is not now ſo much the purſuit of the enlightened breeders of this neighbourhood, as the more valuable property of getting *fat* at an *early age;* and they have ſo far obtained this end, as frequently to ſell their three-years-old ſteers to the butchers exceeding fat in May for 20l. a-piece.—The management of ſuch

ſuch ſteers is in general as follows:—The firſt Winter they have hay and turnips; the following Summer, coarſe paſture; the ſecond Winter, ſtraw in the fold-yard, and a few turnips, *once a day*, in an adjoining field, juſt ſufficient to prevent the ſtraw from binding them too much; the next Summer, tolerable good paſture; and the third Winter, as many turnips as they can eat, and in every reſpect treated as fatting cattle.

The heavieſt and largeſt oxen of the ſhort-horned breed, when properly fed, victual the Eaſt-India ſhips, as they produce the thickeſt beef, which, by retaining its juices, is the beſt adapted for ſuch long voyages. Our royal navy ſhould alſo be victualled from theſe; but by the jobs made by contractors, and other abuſes, I am afraid our honeſt tars are often fed with beef of an inferior quality: However the coal ſhips from Newcaſtle, Shields, Sunderland, &c. are wholly ſupplied with the beef of theſe valuable animals. Theſe

Theſe oxen commonly weigh from 60 to 100 ſtone, (14lb. to the ſtone) and they have ſeveral times been fed to 120, 130, and ſome particular ones to upwards of 150 ſtone, the four quarters only.—Mr Hill, of Blackwell, near Darlington, in the county of Durham, in December, 1779, had an ox killed, riſing 6 years old, of his own breeding and feeding,—the particulars of his weight, &c. are as under:—

	St.	*lb.*		*£.*	*s.*	*d.*
Two fore-quarters	75	7	at 4s. per ſtone	15	2	0
hind ditto	76	3	at 5s. ditto	19	1	0
Wt. of whole car.	151	10		34	3	0
Tallow	11	0	at 4s. ditto	2	4	0
Hide	9	0	at 4s. ditto	1	16	0
Total	171	10	Value	38	3	0

Two oxen, bred and fed by Sir Henry Grey, Bart. of Howick, in Northumberland, ſeven years old, were killed in March, 1787, and weighed as follows:—

The

The RED OX.

	ſt. lb.		*£. s. d.*
Two fore-quarters	82 2	at 4s. per ſtone	16 8 6
hind ditto	70 7	at 5s. ditto	17 12 6
Wt. of whole car.	152 9		34 1 0
Tallow	16 7	at 4s. ditto	3 6 0
Hide	9 2	at 4s. ditto	1 16 6
Total	178 4	Value	39 3 6

MOTTLED OX.

	ſt.	*lb.*		*£. s. d.*
Two fore-quarters	80	7½	at 4s. per ſtone	16 2 2
hind ditto	72	0½	at 5s. ditto	18 0 2
Wt. of whole car.	152	8		34 2 4
Tallow	16	0	at 4s. ditto	3 4 0
Hide	9	11	at 4s. ditto	1 19 2
Total	178	5	Value	39 5 6

An ox, 5 years old, bred and fed by Mr Milbanks, of Barningham, in Yorkſhire, was killed at Barnardcaſtle, in April, 1789, by Mr Lonſdale,—his

	ſt.	*lb.*			*£.*	*s.*	*d.*
Two fore-quarters	74	8½	at 4s. per ſtone		14	18	5
hind ditto	75	10	at 5s. ditto		18	18	7
Wt. of whole car.	150	4½			33	17	0
Tallow	16	0	at 4s. ditto		3	4	0
Hide	10	11	at 4s. ditto		2	3	0
Total	177	1½		Value	39	4	0

From the above ſtatement it appears, that the Barningham ox, at 5 years old, was of equal value with the others at 6 and 7.

The heavieſt females of this breed of cattle, that have come to our knowledge, were,

A *Cow*, bred and fed by William Smith, Eſq; of Togſton, Northumberland,—

	ſt.	*lb.*
Two fore-quarters	65	4
hind ditto	62	7
Weight of carcaſe	127	11
Tallow	15	12
Hide	6	8
Total	150	3

A Spayed

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A Spayed Heifer,

ſix years old, bred and fed by Sir Henry Grey, Bart. the carcaſe of which weighed 132ſt. 6lb.

The Devonſhire Cattle

are ſaid to be found in the greateſt purity, and of the beſt kind, in the vicinity of Barnſtaple;* theſe are of a high red colour, (if any white ſpots, they reckon the breed impure, particularly if thoſe ſpots run into one another) with a light-dun ring round the eye, and the muzzle of the ſame colour; fine in the bone, clean in the neck, horns of a medium length bent upwards, thin faced and fine in the chops, wide in the hips, a tolera-

* I was favoured with this account by the ingenious and intelligent Mr Mure, agent to Lord Daer, who lately made an Agricultural Tour through the greateſt part of England.

ble barrel, but rather flat on the ſides, tail ſmall and ſet on very high; they are thin-ſkinned, and ſilky in handling, feed at an early age, or arrive at maturity ſooner than moſt other breeds; they are well fitted for draught, both as to hardineſs, quick movement, and their ſhoulder-points beautifully fitted for the braham or collar.

The Suſſex and Herefordſhire Cattle,

are varieties of the Devonſhire, of a greater ſize; the Herefordſhire being the largeſt.—Of theſe cattle I was favoured by Mr Ellman with the following deſcription:—Colour red, fine hair, and very thin ſkin, neck and head clean, horns neither long nor ſhort, rather turning up at the points; in general well made in the hind quarters, wide acroſs the hips, rump, and ſirloin, but narrow on the chine; tolerably ſtraight along the

the back, ribs or ſides lying too flat, thin in the thigh, and bone not large. An ox, 6 years old, when fat, will weigh from 60 to 100 ſtone, (14lb. to the ſtone) the fore-quarters generally the heavieſt. The oxen are moſtly worked from 3 to 6 years old, ſometimes 7, when they are turned off for feeding.

The calves run with the cows till they are 11 or 12 weeks old, when they are weaned and turned to graſs. A good cow, after the calf is taken from her, (if well kept) will produce from 6 to 8 lb. of butter a week, for 3 or 4 months after taking off the calf, and double that quantity of ſkimmed-milk cheeſe. They do not give ſo large a quantity of milk as the Suffolk cattle, but it is much richer in quality.

The Long-horned, or Lancaſhire Kind,

are diſtinguiſhed from others by the length of their horns, the thickneſs and

firm texture of their hides, the length and cloſeneſs of their hair, the large ſize of their hoofs, and coarſe, leathery, thick necks; they likewiſe are deeper made in their fore-quarters, and lighter in their hind-quarters, than the other breeds in general; they are narrower in their ſhape, leſs in point of weight, than the ſhort-horns, though better weighers in proportion to their ſize, and give conſiderably leſs milk, though it is ſaid to afford more cream in proportion.

They are more varied in colour than any of the other breeds; but whatever the colour be, they have (in general) a white ſtreak along their back, which the breeders term *finched*, and moſtly a white ſpot on the inſide of the hough.

Many people contend that they are the native or original breed of this iſland. It is not eaſy to aſcertain this matter; if I may venture a conjecture, I think it is probable theſe have been the inhabi-

tants

tants of the open plain country; whilſt the Wild breed, or perhaps the Welch and Scotch, poſſeſſed the woody, wild, and mountainous parts of the iſland.—However, Lancaſhire at preſent, and for a long time paſt, has as much right to be called the mother-country for long-horned cattle, as Lincolnſhire has to the large long-woolled ſheep; for though all or moſt of the cheeſe-dairies in Cheſhire, Glouceſterſhire, &c. and indeed the greateſt part of the midland counties, employ a kind of long-horned cows, yet they are only a ſhabby mixed breed, much inferior in ſize and figure to the Lancaſhire breed, from whence it is very probable they all originated.

Leiceſterſhire, Warwickſhire, &c. have got a better and more profitable ſort of long-horns than Lancaſhire at preſent, by buying their beſt bulls and heifers, for many years paſt, before the people of Lancaſhire were well aware of it. The

former paid more attention to that kind, which were of a true mould or form, and quicker feeders; while the latter contented themſelves with the old-faſhioned, large, big-boned kind, which are not only ſlower feeders, but, when fed, are not ſuch good beef. In ſhort, the little farmers in Lancaſhire, tempted with the high prices given them for their beſt ſtock, had loſt their valuable breed before they were ſenſible of it.

This breed is underſtood by graziers to be in general rather ſlow feeders, except that particular kind ſelected and recommended by Mr Bakewell; theſe are ſaid to eat leſs food than the others, to become remarkably fat in a ſhort ſpace of time, and to lay their fat upon the moſt valuable parts, but have little tallow in them when killed; and, when uſed in the dairy, give very little milk. This variety alſo differs from the reſt of the long-horned cattle, in having very fine, clean, ſmall bones in their legs, and thin hides.

As

As I may have frequent occaſion to mention Mr Bakewell, from the ſuperior manner in which he has diſtinguiſhed himſelf in the breeding of cattle and ſheep, I ſhall, by a ſhort digreſſion, endeavour to point out ſome of the principal advantages which this Gentleman's breed of ſtock has over thoſe that were in the greateſt repute before his day; for he has not only ſelected a breed of cattle and ſheep, different from, and ſuperior in many eſſential reſpects, to moſt others, but eſtabliſhed them in ſuch a manner, as to gain ground in every corner of Great Britain and Ireland, in conſequence of their ſuperior merit.

The kind of cattle moſt eſteemed before Mr Bakewell's day, were the large, long-bodied, big-boned, coarſe, flat-ſided kind, and often lyery or black-fleſhed.—On the contrary, this diſcerning breeder introduced a middle-ſized, clean, ſmall-boned, round-carcaſed, kindly-looking cattle, and inclined to be fat.

His

His ſheep are ſtill more excellent than his cattle; but as we ſhall have occaſion to ſpeak of theſe afterwards, I will only add, that perhaps this Gentleman was the principal cauſe of the Lancaſhire people loſing their beſt breed; but then he was alſo the means of eſtabliſhing a much more advantageous one in Leiceſterſhire.

There are ſeveral more eminent breeders in that ſpirited part of the iſland, where they have carried the breeding of uſeful ſtock to a perfection unknown in former days, and of which ſome parts of the iſland have ſtill a very faint idea; to ſuch, the prices given for the Stock of Mr Fowler, of Little Rollright, in Oxfordſhire, at his ſale, (27th March, 1791) will appear ſurpriſing, and ſhew in what eſtimation well-bred cattle are held amongſt the breeders of the midland counties:—

Garrick,

Garrick, a 5-years old	Bull, was ſold for	205	Guineas
Sultan, 2 ditto	ditto	210	
Waſhington, 2 ditto	ditto	205	
Young Sultan, 1 ditto	ditto	200	
1 ditto	ditto	145	
1 ditto	ditto	100	
Brindled Beauty, a Cow		260	
Waſhington's Mother, ditto		185	

At Mr Paget's ſale, (14th Nov. 1793) Shakeſpear, a Bull, bred by Mr Fowler, was ſold for 400

In the Spring of 1792 Mr Bakewell let a Bull for 152 guineas, to be uſed only four months, viz. to go the firſt of May, and return home again on the firſt of September; probably the higheſt price that was ever given for the hire of a bull, to be uſed ſo ſhort a time, and at ſo late a ſeaſon.

The Galloway Breed, or Polled Cattle,

are a very valuable breed, and ſeem to be, in weight and ſize, as much leſs than the long-horns, as theſe are than the ſhort-horns;

horns; they generally weigh from 40 to 60 ſt. ſome particular ones reach 70 and upwards; but their moſt eſſential difference from every other breed of cattle is, in having no horns at all; ſome few indeed (in every other reſpect Polls) have two little unmeaning horns, from two to four inches long, hanging down looſe from the ſame parts that other cattle's horns grow, and are joined to the head by a little looſe ſkin and fleſh. In moſt other reſpects (except wanting horns) theſe cattle reſemble the long-horns, both in colour and ſhape, only they are ſhorter in their form, which probably makes them weigh leſs. Their hides ſeem to be in a medium between the two laſt-mentioned breeds, not ſo thick as the long-horns, nor ſo thin as the ſhort-horns; but, like the beſt feeding kind of long-horns, they lay their fat upon the moſt valuable parts, and their beef is well marbled, or mixed with fat.

We find a few of this breed ſtraggling through

through different parts of England; among the reſt, I remember the Earl of Darlington had a very handſome variety of them, finely globed with red and white. But we muſt look for the original of theſe in Galloway, (a large diſtrict in the South-weſt of Scotland) where they are moſtly bred upon the moors or hilly country, and grazed upon the lands nearer the ſea, until riſing four or five years old, when the graziers and drovers take them up in great numbers to the fairs in Norfolk and Suffolk, previous to the turnip-feeding ſeaſon, from whence the greateſt part are again removed in the Winter and Spring, (when fat) to ſupply the amazing conſumption of the capital, where they are readily ſold, and at high prices; for few or no cattle ſell ſo high in Smithfield market, they being ſuch nice cutters-up, owing to laying the fat upon the moſt valuable parts; a great excellence in all feeding cattle. It is no uncommon thing, in this refined market,

to

to ſee one of theſe little bullocks outſell a coarſe Lincolnſhire ox, tho' the latter be heavier by ſeveral ſtones.*

I have been informed, from good authority, that the polled cows are very good milkers, in *proportion to their ſize*, and the milk of a rich quality, yielding much more butter from a given quantity of milk than the ſhort-horns; and alſo, that the oxen and ſpayed-heifers anſwer well for the draught, which certainly adds to the value of this excellent breed.

In Galloway they ſpay more heifers than perhaps in all the iſland beſides; and in this too their method is different from any other part I am acquainted with, for they do not caſtrate them until they are about a year old; whereas in

* I was told by a Lincolnſhire grazier, that a Lincolnſhire bullock and a Galloway bullock, ſent from the ſame village to Smithfield at the ſame time, were ſold for the ſame money, tho' the Scot was only half the other's weight.

every

every other place I know, the heifer-calves are ſpayed from one to three months old; and it is now generally admitted, as the ſafeſt practice, to caſtrate calves and lambs, male or female, while very young.

Their manner of rearing calves is ſtill more ſingular:—The calves, from the time they are dropped till able to ſupport themſelves, are allowed to run with their dams, but are prevented from ſucking, by means of a ſmall piece of leather, with ſharp ſpikes of iron fixed upon the outſide, tied upon the upper part of the calf's noſe, which, by pricking the cow every time the calf attempts to ſuck, prevents her from letting it, until the milk-maid comes, when ſhe takes off the muzzle from the little animal's noſe, and, while ſhe ſtrips two of the teats, the calf takes care to empty the other two; as ſoon as the maid has done, ſhe fixes on the inſtrument again, but it is done in ſuch a manner as not to hinder the calf

calf from feeding upon the graſs, tho' it is not allowed to taſte the milk until the girl returns to her milking. In ſome parts of Scotland the general practice is, to milk three times a day in Summer; but I do not recollect whether this is done in Galloway.

Tho' the generality of their cattle are polled, yet they have ſeveral with horns, which they ſay are a *baſtard* or *mongrel* breed, by croſſing with long-horned bulls from Weſtmoreland and Cumberland.—They prefer the polled ones, and of theſe the black or dark-brindled ones, to any other; and all allow them to be the original breed of the country.

The breeders in Galloway complain of their old breed being loſt, or at leaſt much worn out; but admitting their breed of cattle in ſome degree injured, yet there is little doubt, not only of its being recovered, but ſtill more improved, when ſuch a leading Nobleman as Lord Sel-

Selkirk* is among the breeders.—Mr Murray, of Broughton, and Mr Heron, of Kirvochtree, have been long eminent in the breeding of Galloway cattle. Mr Craik, Mr Dalzell, and ſeveral others, have tried a croſs from Mr Bakewell's bulls; how far this has ſucceeded, I have not been able to learn: Indeed I do not ſee how they can form a judgment themſelves without a full trial. But I found that the generality of the breeders were againſt croſſing with Mr Bakewell's, or any other kind of cattle; believing that their real original polled breed, had already been injured by croſſing with different kinds.

SUFFOLK DUNS,

ſo called, from their being the prevailing kind of neat cattle in the county of Suf-

* I am happy to find that his reſpectable ſon (Lord Daer) is purſuing the breeding of good ſtock, with zeal and judgment.

folk, and which ſome may think a diſtinct ſpecies; but I am inclined to believe them no more than a variety of the Galloway breed, which might eaſily take place, from the great connection that has long ſubſiſted between the Scotch Galloway drovers of cattle, and the Suffolk and Norfolk feeders or graziers of them. Both kinds are in general polled; and tho' the Suffolks are almoſt all light Duns, while the others are of various colours; yet this might at firſt proceed from a partiality to that colour. But from whatever place or cauſe this variety took its riſe, they are at preſent a very uſeful kind of little cattle, particularly for the dairy; and great numbers of them are employed in that line in ſome parts of Suffolk, where perhaps the beſt butter and the worſt cheeſe in the kingdom are made. The cows give great quantities of milk. Mr Young ſays, they give in common, 24 quarts a day, which is nearly equal to the beſt ſhort-horned

cows.

cows.—The yearly produce of a cow, Mr Young ſtates to be,—

	£.	s.	d.
3 Firkins of Butter at 32s.	4	16	0
¾ of a Wey of Cheeſe	1	4	0
A Hog	1	0	0
Calf	0	10	0
Total	£ 7	10	0

We find the cows of this kind, like all other deep milkers, very lean, very plain, and very big-bellied;—the weight of this breed of cattle is on an average about 50 ſt.

The KYLOES

are ſtill leſs in proportion to the polled cattle than they are to the long-horns; this breed are alſo covered with a long cloſe coat of hair, like the polls and long-horns; and, like theſe, their beef is fine-grained, well flavoured, and mixed or marbled, but not ſo handſome on the outſide of the beef when killed, being

not of ſo bright a colour, and often ſpotted with black, even upon the beſt parts, except when made very fat. When grazed, they feed very readily; their weight in general being from 20 to 35 ſt.; ſome particular ones reach to more than 40ſt.* The moſt prevalent colour is black, ſome are brindled or dun; but the breeders here, like thoſe in Galloway, prefer the black ones.

Theſe hardy animals are in poſſeſſion of all that extenſive and mountainous country, called the Highlands of Scot-

* A kyloe bred in Cantire, and fed by Mr Spearman, of Rothley-Park, in Northumberland, was killed 22d July, 1790, and weighed as under,—

	ſt.	*lb.*
Two fore-quarters	43	12
hind ditto	37	8½
Weight of carcaſe	81	6½
Tallow	13	0
Hide	6	4
Total	100	10½

land,

land, (together with the Weſtern Iſles) bounded on all ſides by the Sea and the Grampian-Hills, the latter of which begin on the North ſide of the Frith of Clyde, and run Eaſtward into the Sea near Aberdeen.

All the Lowlands of Scotland, except Galloway, have a mixed breed of cattle; towards Cumberland, they are half long-horns, half polls; on the borders of Northumberland, they are mixed with ſhort-horns, until you reach near Tiviot-dale, where they become altogether a coarſe kind of ſhort-horned, or what the Yorkſhire jobbers call *runts;* except a few pretty good ſhort-horned cattle, bred in that pleaſant and fine country, the Tweedſide. This ſame kind of *runtiſh* coarſe breed, continues all the way to the Frith of Forth.—Croſſing this narrow ſea into Fifeſhire, you would at firſt imagine the Fife cattle a diſtinct breed, from their upright white horns, being exceedingly light-lyered, and thin-thigh-

ed: But I am pretty clear it is only from their being more nearly allied to the kyloes, and conſequently leſs of the coarſe kind of ſhort-horns in them.*—The cattle all along this coaſt continue to change more and more, growing ſtill leſs, until, upon the edges of the mountains, they become quite of the kyloe kind; but ſtill much inferior to that pure, unmixed, valuable breed of kyloes, which we meet with in the more Northern and Weſtern Highlands and all the Iſles, but particularly in the Iſle of Skye, and that tract of country called Kintail. It is in theſe two diſtricts that you meet with the native breed of kyloes; a hardy, induſtrious, and excellent breed of cattle,

* I have lately been told that the Fifeſhire cattle are in very great repute in the South of England, as good graziers, and bid fair to rival the Galloway cattle in Smithfield market.—May not this be owing to the Galloway cattle being injured by croſſing with a coarſe kind of long-horns, bred in the Engliſh borders; and, probably, the Fifeſhire breeders of late paying more attention?

calculated

calculated in every reſpect to thrive in a cold, expoſed, mountainous country, and better adapted to the cold regions where they are bred, than any other kind we are acquainted with.

Theſe cattle are driven to the Southward in great numbers every Autumn; many into the Weſtern diſtricts of Yorkſhire; but the greateſt part are ſent into Norfolk, Suffolk, Eſſex, and other parts of the South of England, where they are fatted, and either ſlaughtered at their home-markets, or ſent to Smithfield.

The demand for kyloes into England is of vaſt importance to thoſe nobility and gentry who have eſtates in the North of Scotland; as the moſt of their rents are paid in live cattle.

Admiral Sir John Lockhart Roſs, and ſome other ſpirited gentlemen, have tried ſome croſſes, &c. between long-horned bulls and the Iſle of Skye cows. Whether this will anſwer the end deſired or not, time will ſhew; but whatever the

reſult may be, there is certainly great merit in the attempt.

The ALDERNEY BREED

It is only to be met with about the ſeats of our nobility and gentry, upon account of their giving exceeding rich milk, to ſupport the luxury of the tea-table, &c. Indeed if it was not for the ſake of method, and my believing them a diſtinct breed, I might have ſaved the trouble of naming them at all; as I imagine this breed too delicate and tender ever to be much attended to by our Britiſh farmers, becauſe they are not able to bear the cold of this iſland, particularly the Northmoſt parts of it. They are very fine-boned in general, light-red or yellow in colour, and their beef generally yellow' or very high-coloured, tho' very fine in the grain, and well-flavoured.—They make themſelves very fat; and none of them in the leaſt ſubject to lyer,

or

or black-fleſh. I have ſeen ſome very uſeful cattle bred from a croſs between an Alderney cow and a ſhort-horned bull.

The WILD BREED,

from being untameable, can only be kept within walls or good fences; conſequently very few of them are now to be met with, except in the parks of ſome gentlemen, who keep them for ornament, and as a curioſity; thoſe I have ſeen are at Chillingham-Caſtle, in Northumberland, a ſeat belonging to the Earl of Tankerville. Their colour is invariably of a creamy white; muzzle black; the whole of the inſide of the ear, and about one-third of the outſide, from the tips downward, red; horns white, with black tips, very fine, and bent upwards; ſome of the bulls have a thin upright mane, about an inch and a half or two inches long. The weight of the oxen is from

35 to 45 ſt. and the cows from 25 to 35 ſt. the four quarters (14lb. to the ſtone).—The beef is finely marbled, and of excellent flavour.

From the nature of their paſture, and the frequent agitation they are put into by the curioſity of ſtrangers, it is ſcarce to be expected they ſhould get very fat; yet the ſix-years-old oxen are generally very good beef, from whence it may be fairly ſuppoſed that in proper ſituations they would feed well.

At the firſt appearance of any perſon they ſet off in full gallop, and, at the diſtance of about two hundred yards, make a wheel round and come boldly up again, toſſing their heads in a menacing manner; on a ſudden they make a full ſtop at the diſtance of forty or fifty yards, looking wildly at the object of their ſurprize, but upon the leaſt motion being made, they all again turn round, and fly off with equal ſpeed, but not to the ſame diſtance, forming a ſhorter circle,

cle, and again returning with a bolder and more threatening aſpect than before; they approach much nearer, probably within thirty yards, when they again make another ſtand, and again fly off: This they do ſeveral times, ſhortening their diſtance, and advancing nearer and nearer, till they come within ſuch a ſhort diſtance, that moſt people think it prudent to leave them, not chuſing to provoke them further.

The mode of killing them was perhaps the only modern remains of the grandeur of ancient hunting.—On notice being given, that a wild bull would be killed on a certain day, the inhabitants of the neighbourhood came mounted and armed with guns, &c. ſometimes to the amount of an hundred horſe, and four or five hundred foot, who ſtood upon walls or got into trees, while the horſemen rode off the bull from the reſt of the herd until he ſtood at bay, when a markſman diſmounted and ſhot. At

ſome

ſome of theſe huntings twenty or thirty ſhots have been fired before he was ſubdued. On ſuch occaſions, the bleeding victim grew deſperately furious, from the ſmarting of his wounds, and the ſhouts of ſavage joy that were echoing from every ſide. But from the number of accidents that happened, this dangerous mode has been little practiſed of late years, the park-keeper alone generally ſhooting them with a rifled gun at one ſhot.

When the cows calve, they hide their calves for a week or ten days in ſome ſequeſtered ſituation, and go and ſuckle them two or three times a day. If any perſon come near the calves, they clap their heads cloſe to the ground, and lie like an hare in form, to hide themſelves; this is a proof of their native wildneſs, and is corroborated by the following circumſtance that happened to the writer*

* Mr Bailey, of Chillingham.

of

of this narrative, who found an hidden calf, two days old, very lean and very weak: On ſtroking its head it got up, pawed two or three times like an old bull, bellowed very loud, ſtepped back a few ſteps, and *bolted* at his legs with all its force; it then began to paw again, bellowed, ſtepped back, and bolted as before; but knowing its intention, and ſtepping aſide, it miſſed him, fell, and was ſo very weak, that it could not riſe, tho' it made ſeveral efforts;—but it had done enough;—the whole herd were alarmed, and, coming to its reſcue, obliged him to retire; for the dams will allow no perſon to touch their calves, without attacking them with impetuous ferocity.

When a calf is intended to be caſtrated, the park-keeper marks the place where it is hid, and, when the herd are at a diſtance, takes an aſſiſtant with him on horſeback; they tie an handkerchief round

round the calf's mouth to prevent its bellowing, and then perform the operation in the uſual way, with as much expedition as poſſible.—When any one happens to be wounded, or is grown weak and feeble through age or ſickneſs, the reſt of the herd ſet upon it and gore it to death.

Having now gone through the deſcriptions and properties of the various breeds of cattle, which, I preſume, are moſt worthy the attention of farmers, graziers, and breeders, I ſhall now offer a few

COMPARATIVE OBSERVATIONS;

in doing which, we ſhall begin with thoſe two breeds of cattle, the *ſhort-horns* and the *long-horns*, that are at preſent in poſſeſſion of the beſt and greateſt part of this

this iſland.—Theſe two rival breeds (between whom it has long been a diſpute with the breeders of both which are the beſt and moſt advantageous) have been variouſly intermixed in different parts of Great Britain; but it is the two unmixed diſtinct breeds, that we now mean to compare, and, to the beſt of our knowledge, point out their different perfections and imperfections, and then leave the candid experienced reader to form his own judgments.

We have already obſerved, that the long-horns excel in the thickneſs and firm texture of the hide, in the length and cloſeneſs of the hair, in their beef being finer grained and more mixed and marbled than that of the ſhort-horns, in weighing more in proportion to their ſize, and in giving richer milk; but they are inferior to the ſhort-horns, in giving a leſs quantity of milk, in weighing leſs upon the whole, in affording leſs

tallow

tallow when killed, in being generally ſlower feeders, and in being coarſer made and more leathery or bulliſh in the under ſide of the neck. In few words, the long-horns excel in the hide, hair, and quality of the beef; the ſhort-horns in the quantity of beef, tallow, and milk.—Each breed have long had, and probably may have, their particular advocates; but if I may hazard a conjecture, is it not probable that both kinds may have their particular advantages in different ſituations? Why not the thick, firm hides, and long cloſe-ſet hair of the one kind, be a protection and ſecurity againſt thoſe impetuous winds and heavy rains to which the Weſt coaſt of this iſland is ſo ſubject; while the more regular ſeaſons and mild climate upon the Eaſt coaſt, are more ſuitable to the conſtitutions of the ſhort-horns?—When I ſay the long-horns exceed the ſhort-horns in the quality of the beef, I mean, that preference is only due to the particular variety of long-

long-horns taken notice of before, as ſelected, improved, and recommended by that attentive breeder, Mr Bakewell; for as to the long-horned breed in common, I am inclined to think their beef rather inferior, than ſuperior, to that of the generality of ſhort-horns; and there is little doubt but a breed of ſhort-horned cattle might be ſelected, *equal*, if not *ſuperior*, to even that very kindly-fleſhed ſort of Mr Bakewell's; provided any able breeder, or body of breeders, would pay as much attention to theſe, as Mr Bakewell and his neighbours have done to the long-horns. But it has hitherto been the misfortune of the ſhort-horned breeders to purſue the largeſt and biggeſt boned ones for the beſt, without conſidering that thoſe are the beſt that pay the moſt money for a given quantity of food. However, the ideas of our ſhort-horned breeders being now more enlarged, and their minds more open to conviction, we may hope in a

few years to ſee great improvements made in that breed of cattle.*

But notwithſtanding theſe two breeds have hitherto been in poſſeſſion of the beſt part of the iſland, yet I am inclined to think that the Galloway cattle, and even the Kyloes, might be bred with advantage in many ſituations, ſo as to be more profitable than either the ſhort-horns or the long-horns: I have a very high opinion of both theſe breeds of cattle, as true quick feeders, and being kindly-fleſhed, or excellent eating beef, which character they have eſtabliſhed in the firſt market in the iſland.

My readers will in general agree with me, that Kyloes are better adapted to cold, expoſed, heathy mountains, than

* I am glad to find my hopes have been well founded; becauſe, ſince the publication of the firſt edition of this work, a very rapid improvement has taken place in the breeding of ſhort-horned cattle, ſo that in a few years I have reaſon to think they will ſurpaſs their rivals, the long-horns.

any

any other breed we have. I have before hinted, that particular breeds are probably beſt adapted to particular ſituations, and would recommend to breeders of *cattle* to find out which breed is the moſt profitable and beſt ſuited to their ſituations, and endeavour to improve that breed to the utmoſt, rather than try to unite the particular qualities of two or more diſtinct breeds by croſſing, which is a precarious practice; for we generally find the produce inherit the coarſeneſs of both breeds, and rarely attain the good properties which the pure diſtinct breeds individually poſſeſs.

Drawing Oxen.

I am ſorry to obſerve, that there are not ſo many ſteers kept now as uſed to be formerly. Two reaſons may be aſſigned for this:—Firſt, lands are now rented ſo high, that farmers cannot afford to keep ſteers to the age of oxen without

working them; which brings me to my ſecond reaſon, viz. that fewer oxen are uſed in the draught now than formerly. A remedy for this complaint perhaps may not be ſo readily pointed out; becauſe, tho' a few people are convinced of the utility of drawing oxen in many caſes, yet the generality of farmers will be very unwilling to be perſuaded to this, becauſe oxen are ſlower in their motion than horſes, without adverting to the advantages attending the oxen in the feeding, ſhoeing, harneſs, &c.; but above all, the concluſion (between an ox fatted for the ſhambles, after working three or four years, or indeed a lean ox ſold to feed, and a horſe ſold to the dog-kennel) is ſo exceedingly ſtriking, that I preſume moſt people, when they reflect upon this very important matter, will agree to the drawing of oxen in every kind of work wherein they *ſuit*; I uſe the expreſſion *ſuit*, becauſe I would not be underſtood to think, as ſome people do,

do, that oxen will anſwer as well as horſes in every kind of farming-work: But I apprehend that oxen will do ſeveral kinds of home-work (ſuch as ploughing, leading dung, corn, &c.) equally as well as horſes. I advance this opinion on ſeveral years experience,* and believe, that moſt farmers might uſe ſome oxen along with their horſes, but would in general recommend the oxen and horſes to be in ſeparate draughts, becauſe the difference of the ſtep is ſo very unequal.

Much more might be ſaid upon this important ſubject, but I will at preſent only add, that I heartily wiſh our le-

* The author and his brother in partnerſhip, at this time employ about 150 oxen in the draught, which is mentioned here as a proof that they approve of drawing oxen in many caſes, after more than thirty years experience; they uſe them in carts ſingly, and two in a plough, with cords, without a driver, where they go equally as well as two horſes, tho' not quite ſo ſwift; and I am happy to add, that the working of oxen is becoming more general every day, as many of our neighbours are following this example.

giſlature would take this matter into conſideration, and give premiums to encourage the rearing and drawing of oxen, and alſo to promote the breeding of the beſt kinds of ſtock, as there is little doubt but it would have moſt beneficial effects. It is true that many of our agricultural ſocieties do give premiums for the above purpoſes; but theſe, tho' highly meritorious, are only partial, and confined to certain diſtricts, while the influence of the other would be general and extenſive.

The North part of Durham, all Northumberland, and a few places in the South of Scotland, are almoſt the only places I know where any number of oxen are now kept to age. Part of theſe are bought by the drovers to go South for grazing, the reſt are fed at home to ſupply the coal-trade.—Oxen are alſo uſed for the draught in Suſſex, Herefordſhire, Devonſhire, and ſome of the other Weſtern counties; but thoſe of Lancaſhire

Lancaſhire, Yorkſhire, &c. are now moſtly ſold at three, four, or at moſt, five years old.

Great milkers, not quick feeders.

I apprehend one great miſtake that breeders in general have run into, eſpecially in breeding neat cattle, has been, endeavouring to unite great milkers with quick feeders. I am inclined to think this cannot be done; for, wherever we attempt both, we are ſure to get neither in any perfection: In proportion as we gain the one, in the ſame proportion we loſe the other; the more milk, the leſs beef; and the more we purſue beef, the leſs milk we get. In truth, they ſeem to be two different varieties of the ſame kind, for very different uſes; and if ſo, they ought moſt certainly to be differently purſued by thoſe that employ them. If the dairy-man wants milk, let him purſue the milking tribe;

let him have both bull and cows of the beſt and greateſt milking-family he can find: On the contrary, he that wants feeding or grazing cattle, let him procure a bull and cows of that ſort which feed the quickeſt, wherever they are to be found. By purſuing too many objects at once, we are apt to loſe ſight of the principal; and, by aiming at too much, we often loſe all: Let us only keep to diſtinct ſorts, and we will obtain the prize in due time. I apprehend it has been much owing to the mixing of breeds and improper croſſings, that kept us ſo long from diſtinguiſhing the moſt valuable kinds.

I do not ſuppoſe this doctrine to be ſo new, as it has been unattended to, and not properly conſidered; for I have heard many people ſay, 'How ſhould 'that cow be a good milker; ſhe runs 'too much to fleſh?' and ſo it is, while all the great milkers are invariably thin. The former are generally high-ſided, light-

light-bellied, covered in all their fatting points, in proportion as they recede from the great milking-tribe, though kept on middling fare; while the latter will be lean upon their backs, flat-ſided, big-bellied, poor, and ill-looking, though much better kept than the others.

I own there is a middling kind of cows which give a tolerable quantity of milk, and alſo keep in pretty good condition; but this, I apprehend, does not at all militate againſt the above reaſoning, becauſe, ſtill thoſe that incline the moſt to fleſh, invariably give the leaſt milk, and *vice verſa:* And tho' many of the middling cows will make very fat when they are dried, or the milk taken from them, yet will not get ſo quickly fat, nor ſo ripe, as thoſe which give leſs milk, and are inclined more to fatten while in a milking ſtate.

Iriſh

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Iriſh Cattle.

I have hitherto taken no notice of the Iriſh cattle; tho' it behoves the breeders in that iſland, above all others in the Britiſh dominions, to pay attention to the breeding of cattle, as beef is the ſtaple commodity of the iſland; and however Great Britain may have ſuffered, it is highly probable that the Iriſh have been benefited by the high price their beef bore during the war with America, and indeed every war.—I take the Iriſh cattle to be a mixed breed between the long-horns and the Welch or Scotch, but moſt inclined to the long-horns, tho' of a leſs weight than thoſe in England. It is wonderful to conſider the numbers of cattle that fertile iſland produces: I have ſeen at one fair at Ballinaſloe, in the county of Roſcommon, I believe thirty-five thouſand head of cattle ſhewn, and half of theſe fat ones, all bought

bought up for the ſlaughter at Cork.—Of late years ſeveral of the Iriſh breeders have bought long-horned bulls and heifers at very high prices from Lancaſhire, Leiceſterſhire, Warwickſhire, &c. particularly the Mr Frenches, and other ſpirited breeders from Roſcommon and different parts of the Weſt of Ireland, which have been of very great advantage in improving their breed.—I ſaw ſome of the cattle deſcended from theſe croſſes ſhewn at Ballinaſloe-fair, which were greatly ſuperior to any others ſhewn there.

It may not be thought amiſs, I preſume, before this article is concluded, to give a deſcription of the ox which the ancients judged moſt proper for labour, and of the bull and cow which they judged moſt proper for breeding.

Varro

Varro ſays, "The ox ſhould have ſpacious horns, rather black than otherwiſe, a broad forehead, wide noſtrils, a broad cheſt, and thick dewlap."—In another paſſage he is more particular in his deſcription of this kind of cattle; he ſays, "Perſons that buy them ſhould take care that they be well made, all their members complete; long and deep bodied, with black horns, broad foreheads, large and black eyes, hairy ears, cloſe-ſet jaws, flat noſes, and wide noſtrils; blackiſh lips, thick and long necks, hanging-down dewlaps, broad cheſts, round-ribbed, thick-ſhouldered, not humped, but the back-bone gently declining downwards; round in the hips, with tails hanging down to their heels, and the lower part of them very rough with hair; legs rather ſhort, the knee-joints ſtraight, a little protuberant, and at a proper diſtance from one another; the feet not broad, nor ſuch as clank when going; the diviſions of the hoofs not wide,

wide, and the hoofs themſelves equal and ſmooth; the hide, to the touch, not rough or hard; the ſtrongeſt of which is the hide with the black colour, the ſecond that with the red, the third that with the dun, and the fourth that with the white; for cattle of this colour are the tendereſt, thoſe of the firſt the hardieſt; of the two middle ones, the former is better than the latter, and both theſe kinds are better than either the black or the white."

Columella informs us, that he takes his deſcription of the labouring ox from Mago, the Carthaginian, and he gives it as follows: "The oxen we buy ſhould be young, ſquare, with large members, and lofty horns, black and ſtrong; the forehead broad and rough, hairy ears, black eyes and lips, flat and turned-up noſes, with wide noſtrils; a long and brawny neck, large dewlaps, and reaching almoſt to their knees; the cheſt broad, large ſhoulders, a large and protuberant

tuberant belly, ſides well ſtretched out, broad flanks, the back ſtraight and even, or a little declining; round hips, legs compact and ſtraight, but rather ſhort than long; the knee-joints well ſet, large hoofs, very long tails and hairy; the hairs upon the whole body, thick and ſhort; the colour red, or dark brown; the whole body very ſoft to the touch."

Palladius expreſſes himſelf in this manner: "Theſe marks are to be looked for in oxen, whether we take them from our own herd or that of another,—that they be young, with ſquare and large members, and a compact body, the muſcles and ſinews every-where ſtanding out, large ears, a broad and rough forehead, black eyes and lips, horns ſtrong and curved, without any deformity in the bending; a flat and turned-up noſe, with wide noſtrils; the neck brawny and compact, large dewlap hanging down to the knees; broad cheſt, large ſhoulders, belly rather protuberant, ſides

ſtretched

ſtretched out, broad flanks, the back ſtraight and even, legs firm; nervous, and ſhort; large hoofs, tail long and hairy; the hair upon the whole body thick and ſhort, chiefly of a red or dark-brown colour."

The deſcription that Varro gives is intended for the kind he treats of in general; that which is given by Columella and Palladius, is intended for the labouring ox in particular.—Both theſe authors give likewiſe a deſcription of the bull and cow moſt proper for breeding.

"In my opinion," ſays Columella, "theſe bulls are chiefly approved of which have very large members, placid manners, middle age; almoſt all the other things we ſhould obſerve in them, which we do in chuſing oxen, for there is no difference between a good bull and an ox, except that the bull has a ſtern countenance, a briſker look, ſhorter horns,

horns, a more brawny neck, ſo great indeed, as to be a large part of his body, and a belly a little more confined."

Palladius expreſſes himſelf much to the ſame purpoſe: He ſays, "They ſhould be tall, with huge members, of a middle age, rather young than old, of a ſtern countenance, ſmall horns, a brawny and vaſt neck, and a confined belly."

"The cows," ſays Columella, "moſt approved of, are of a tall make, long, with a very large belly, very broad forehead, eyes black and open, horns graceful, ſmooth, and black hairy ears, ſtrait jaws, very large dewlap and tail, moderate hoofs and legs."

"Likewiſe," ſays Palladius, "now is the time to provide cows; and we ought to chuſe them of a very tall make, long-bodied, with a capacious and large belly, broad forehead, eyes large and black, comely horns, and chiefly black, hairy ears, dewlap and tail very large, ſhort hoofs, and dark and ſmall legs."

Virgil

Virgil gives a deſcription of the cow only, alledging, that the breeders, both of horſes and cows, ſhould attend principally to the make of the female. "If any one," ſays he, "fond of the prize at the Olympic Games, breed horſes, if any one breeds ſtout bullocks for the plough, he chiefly attends to the make of the mother: The beſt ſhaped cow has a ſtern countenance, a large forehead, and much of a neck, with a dewlap hanging down from the chin to the knees; ſides very long, all parts large, even the feet not ſmall, and the ears hairy under the curved horns: Nor do I think it a great defect to be ſpotted with white, to refuſe the yoke, even ſometimes to be rude with her horn; nor that ſhe has the reſemblance of a bull in her countenance, that ſhe is lofty, and, in ſtepping, ſweeps the ground with her tail."

The ruſtic writers are very particular

in their directions about buying cattle; among theſe there is one mentioned by almoſt all of them; it is this, that the ground to which they are brought, be of the ſame kind with that on which they are bred.

Varro ſays, "Old oxen ought not to be brought from champaign lands, to hard and mountainous countries, nor contrarywiſe, if it is poſſible to avoid it."

Columella ſays, "Cattle bred upon the ground are much better than foreigners, for thoſe are not put to the trial with a change either of water, or food, or air, nor incommoded with the cuſtoms and ſituation of the country, as theſe are, that are brought from plain and champaign lands to rough and mountainous, or from mountainous lands to champaign; for this reaſon, when we are obliged to bring oxen from a place at a diſtance, care muſt be taken to bring them from ſuch grounds as our own." Pal-

Palladius, to the ſame purpoſe, ſays, "It is better to buy oxen from the neighbouring grounds, becauſe theſe are put to no trial by a change of ground, or air; or, if this cannot be done, to bring them from like grounds to like."

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A S

DIFFERENT BREED

1	Diſhley	no horns	white faces a
2	Lincolnſhire		
3	Tees-Water		
4	Dartmore Natts		
5	Exmoor	horned	ditto
6	Dorſetſhire	ſmall horns	ditto
7	Herefordſhire	no horns	ditto
8	South-Down	ditto	grey faces an
9	Norfolk	large horns	black faces a
10	Heath	ditto	ditto
11	Herdwick	no horns	ſpeckled face
12	Cheviot	ditto	white faces a
13	Dunfaced	ditto	dun faces an
14	Shetland	ditto	colours vari

YNOPSIS

OF THE

DS OF SHEEP IN GREAT BRITAIN.

		Average weight of fleece per lb.	Price of wool per lb. s. d.	Average weight of wethers per quarter. lb.	Years old when killed.
		8	0 10	25	2
		11	0 10	25	3
s and legs	long wool	9	0 10	30	2
		9	0 8	30	2½
	ditto	6	0 8	16	2½
	fine ſhort wool	3½	1 2	18	3½
	very fine ſhort wool	2	2 9	14	4½
and legs	ditto	2½	2 0	18	2
s and legs	fine ſhort wool	2	1 5	18	3½
	coarſe loug wool	3½	0 6	15	4½
ces and legs	ſhort wool	2	0 6	10	4½
s and legs	fine ſhort wool	3	0 11	16	4½
and legs	ditto	1½	3 0	7	4½
rious	fine cottony wool	1½	3 0	8	4½

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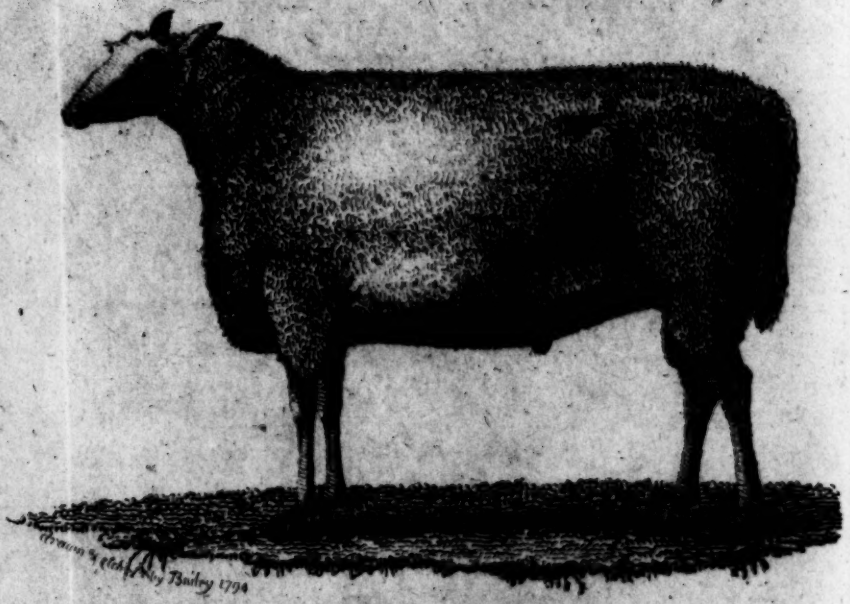

A RAM
of the Dishley Breed, new shorn.

Pa: 103

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SHEEP,

WE may venture to ſay, are of the greateſt importance to this nation, moſt worthy the conſtant attention of the legiſlature, and the particular conſideration of almoſt every farmer in Great Britain; for we have very few farms in this iſland, whereon they may not be kept to advantage, either for breeding, for grazing, or for feeding fat lambs.—Mr Pope ſomewhere ſays, 'The fur that warms the Monarch warm'd a bear.' But the wool of theſe valuable creatures warms every claſs of people, from the king to the beg-

gar, employ thouſands in the manfacturing of their fleeces, and whole fleets in the exportation. Every individual is intereſted in this great ſtaple commodity, from the lord who ſits upon a woolſack, to the induſtrious poor who chearfully card and ſpin; or, as the old Scotch ſong has it,

——— "The bonny harmleſs ſheep
"That feed on mountains ſtay and ſteep,
"Bleating ſweetly as they go,
"Thro' the Winter's froſt and ſnow;
"Hart, and Hind, and Fallow-Deer,
"Not by half, ſo uſeful are.
"Fra kings to him that hads the plow,
"Are all oblig'd to tarry-woo."

The numberleſs flocks that are everywhere ſpread over the face of this iſland, from the Land's-end to Johnny Groat's Houſe, are exceedingly intermixed and varied.—Nevertheleſs, the original diſtinct breeds, I apprehend, may be claſſed as in the annexed ſynopſis.

In

In regard to theſe different breeds of ſheep, we ſhall purſue pretty nearly the ſame method we did with the cattle, after firſt giving

A DESCRIPTION OF THE RAM.

His head ſhould be fine and ſmall, his noſtrils wide and expanded, his eyes prominent and rather bold or daring, ears thin, his collar full from his breaſt and ſhoulders, but tapering gradually all the way to where the neck and head join, which ſhould be very fine and graceful, being perfectly free from any coarſe leather hanging down; the ſhoulders broad and full, which muſt at the ſame time join ſo eaſy to the collar forward, and chine backward, as to leave not the leaſt hollow in either place; the mutton upon his arm or fore-thigh, muſt come quite to the knee; his legs upright, with a clean fine bone, being equally clear from ſuperfluous ſkin and coarſe hairy wool

from the knee and hough downwards; the breaſt broad and well forward, which will keep his fore-legs at a proper wideneſs; his girth or cheſt full and deep, and inſtead of a hollow behind the ſhoulders, that part by ſome called the fore-flank ſhould be quite full; the back and loins broad, flat, and ſtraight, from which the ribs muſt riſe with a fine circular arch; his belly ſtraight, the quarters long and full, with the mutton quite down to the hough, which ſhould neither ſtand in nor out; his twiſt* deep, wide, and full, which, with the broad breaſt, will keep his four legs open and upright; the whole body covered with a thin pelt, and that with fine, bright, ſoft wool.

The nearer any breed of ſheep comes up to the above deſcription, the nearer they approach towards excellence of form; and there is little doubt but if the ſame attention and pains were taken

* Twiſt,—the junction of the inſide of the thighs.

to

to improve any particular breed that has been taken with a certain variety of the Lincolnſhire, the ſame conſequences would be obtained. The variety here meant, is that firſt ſelected by Mr Robert Bakewell, of Diſhley, in Leiceſterſhire, who with ſingular diſcernment and great attention, has raiſed a breed of ſheep unknown in any former period; and which ſurpaſs all other breeds in their propenſity to get fat, and in paying the moſt money for the quantity of food conſumed.—From the reſidence of the firſt ſelector, this variety is now generally known by the name of

The DISHLEY BREED.

They are peculiarly diſtinguiſhed from other long-woolled breeds, by their fine lively eyes, clean heads, ſtraight, broad, flat backs, round (barrel-like) bodies, very fine ſmall bones, thin pelts, and inclination to make fat at an early age; this

this laſt property is moſt probably owing to the before-ſpecified qualities; and which, from long experience and obſervation, there is reaſon to believe, extends through every ſpecies of domeſtic animals. The Diſhley Breed is not only peculiar for its mutton being fat, but alſo for the fineneſs of the grain and ſuperior flavour, above all other large long-woolled ſheep, ſo as to fetch nearly as good a price, in many markets, as the mutton of the ſmall, Highland, and ſhort-woolled breeds.

The weight of the carcaſe in general is,—

Ewes, 3 or 4 years old, from 18lb. to 26lb. a quarter.
Wethers, 2 years old,——20lb. to 30lb. a quarter.

The wool, upon an average, 8lb. a fleece.—The length from 6 to 14 inches, ſold in 1792, at 10d. per lb.

There are two reaſons for killing the wethers at two years old:—Firſt, they leave the moſt profit; and, Secondly, if kept longer, they get too fat for genteel tables.

tables.—To people who are ſtrangers to theſe ſheep, this may appear rather problematical; the following facts may remove their doubts:—A three-year old wether, belonging to the Author, was killed at Alnwick, by Mr James Bolton, the 2d of October, 1787, which meaſured ſeven inches and one-eighth of ſolid fat on the ribs, cut ſtraight thro' without any ſlope, and his back from head to tail, was like the fatteſt bacon. It is very common for two-year old wethers to cut four inches thick of fat on the ribs, and from two to three inches all down the back: Even ewes of this kind, which have bred and ſuckled lambs till July, when killed about the Chriſtmas following, will frequently meaſure four or five inches thick of fat on the ſides, and two or three inches down the back, all the way from head to tail; and tho' this breed are not eminent for much tallow, yet ewes under ſuch circumſtances, generally produce from 18 to 24lb. of tallow

low each. To weak appetites it is not ſo inviting as the leaner mutton, but it finds a ready market amongſt the manufacturing and laborious part of the community, whom neceſſity has taught to lay out their money to the beſt advantage, and who have found by experience, that a pound of bone is not ſo nutritive as a pound of mutton; and of courſe they always endeavour to buy that which has the leaſt bone and moſt fleſh.*

The weight of wool clipped from theſe ſheep is not ſo great as from ſome other long-woolled kinds; but the wool of this breed hath hitherto been only a ſecondary conſideration; the *quantity* and *quality* of the mutton obtained at the *leaſt expence of food*, was the great object of the firſt improver;—this point

* I am well informed that when the laborious claſs find this mutton too fat, they cut off a part of the fatteſt, with which they make ſuet-dumplins, or bread-paſte with it for pies, &c. and not unfrequently make ſea or boiled-pies of the fatteſt parts.

gained,

gained, a new field opens to the experimental rural philoſopher, to cover theſe good carcaſes with the moſt valuable fleeces.

This improved breed is making its way very rapidly into all parts of the kingdom, by the practice of hiring tups; the price of which, for the uſe of one ſeaſon only, is aſtoniſhing; and to thoſe who do not know with what eagerneſs this breed is ſought after, (by all who have tried them) may ſeem incredible; yet it is a fact, that Mr Bakewell has let tups, for one ſeaſon only, for four hundred guineas each, and taken in ewes to be tupped at ten guineas each, (80 from two perſons, and 40 of his own) makes the ſum of twelve hundred guineas for one tup in one ſeaſon: Beſides theſe he lets ſeveral, every year, at two and three hundred guineas each.

Our mode of management of this breed is as follows:—The ewes generally lamb in March, when we give them a few

few turnips to increaſe their milk; the latter end of June or beginning of July, the lambs are weaned, and ſent to middling paſtures; the ewes are milked two or three times to eaſe their udders, and ſuch as are not meant to be continued for breeding, are culled out and put to clover: When this fails, they get turnips, and are ſold about Chriſtmas, very fat, to the butchers, the price from 34s. to 40s. per head.

The lambs, after being weaned, take the name of *hogs*; they are generally put to turnips the beginning of November,* and continue at them till the middle of April or beginning of May, when the wether-hogs are put upon good paſture, or ſecond year's clover. The ſecond Winter they have turnips, till the clover is ſufficiently grown to receive them, which is generally about the mid-

* As we find it prevents a diſorder called the black-water.

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dle of April. They are clipped about the middle of May, and generally all ſold by the middle or end of June.—Morpeth is our beſt market; where the two-ſhear wethers have been ſold, for the laſt three years, from 40s. to 50s. per head.

We generally reckon one-third of the ewes to have two lambs each; that is, every 60 ewes to have 80 lambs.—They are put to the tup, ſo as to have lambs at two years old, and kept for breeding until three or four years old, except ſuch as are of particular good forms, or have other valuable properties, theſe we keep as long as ever they will breed. Such as are defective in ſhape, ſuſpected of being ſlow feeders, or other unprofitable qualities, we never put to the tup, or attempt to breed from them.

The LINCOLNSHIRE BREED

have no horns, white faces, long, thin, and weak carcaſes; the ewes weighing from

from 14 to 20lb. per quarter; the three-year old wethers, from 20 to 30lb. per quarter; have thick, rough, white legs, bones large, pelts thick, and wool long, from 10 to 18 inches, weighing from 8 to 14lb. per fleece, ſold in 1792 for 10d. per lb. and covering a ſlow-feeding, coarſe-grained carcaſe of mutton.

This breed is moſt prevalent in Lincolnſhire; which fertile diſtrict has the ſame right to be called the mother-county or country for long-woolled ſheep, that Lancaſhire has to long-horned cattle: But the compariſon may be carried further; for as this laſt-named county, from paying too much attention to big bones, hides, and horns, ſuffered the Leiceſterſhire and Warwickſhire breeders to ſteal from them their valuable breed above referred to, before they were well aware of it; ſo alſo the Lincolnſhire breeders, by too great a fondneſs for heavy wool and large-boned ſheep, ſuffered the ſame diſcerning ſet of breeders from

from the midland counties, to rob them of a much more valuable breed of ſheep, which they undoubtedly were firſt in poſſeſſion of, before they were ſufficiently ſenſible of the value of them.

It is true, that the Lincolnſhire breeders can juſtly boaſt of clipping the greateſt weight of wool from a given number of ſheep, of any other ſet of people in this iſland: but then this very heavy wool ſeldom or never fails to cover a very coarſe-grained carcaſe of mutton; a kind of mutton well known for its coarſe grain and big bones in the London markets, which not only ſells for leſs money by the pound in the metropolis than any other kind of mutton, but in every market in the iſland, wherever it happens to be expoſed to ſale,* and has brought an odium upon

* On aſking a butcher's wife, at Bury, in Suffolk, how ſhe ſold mutton? *Five-pence a pound, Sir!* anſwered ſhe, ſmartly.—And pray, replied I, (rather ſurpriſed at the high

the large mutton which the beſt kinds do not deſerve.

Yet this is not the worſt of it; for this kind of ſheep cannot be made fat in a reaſonable time, in any part of the iſland except Romney-Marſh, their own rich marſhes in Lincolnſhire, or ſome very rich grazing grounds. Perhaps this is the beſt reaſon we can give for a ſet of ſenſible men ſo long adhering to this coarſe-grained, ſlow-feeding tribe.—Indeed the prodigious weight of wool which is annually ſhorn from theſe ſheep, is an inducement to the marſhmen to give great prices to the breeders for their hogs or hogerils, (as they are

high price) have you no mutton below five-pence? O yes, Sir! rejoins the honeſt woman, "*plenty of Lincolnſhires, at four-pence; but we do not account it mutton, when compared with our Norfolk or Suffolk mutton.*"—And if I may be allowed to give my opinion, they would neither of them be accounted mutton in many markets, even further North in this iſland: The Lincolnſhire, on account of its coarſeneſs; the other, on account of the thinneſs; and both, for having too much bone in proportion to the meat.

there

there called) where though they muſt be kept two years more before they get them fit for market, yet in the mean time they get three clips of wool from them, which alone pays them well in thoſe rich marſhes.

An eminent breeder in Lincolnſhire has favoured me with the following particulars, in a letter dated January, 1793.

" The average price of hogs, bought in at Lincoln and Boſton fairs, is about 26s. per head; if theſe are kept until *three-ſhear*, the average weight of the wool will be about 12lb. a fleece; but when they breed their own ſtock, and have nearly an equal number of ewes, hogs, and wethers, the average weight of the fleece is about 9lb.—Very few *(if any)* of the Lincolnſhire breed, are ready for market at *two-ſhear*; and I am credibly informed, that ſeveral are under the neceſſity of *wintering* ſome of their *three-ſhears*, before they are market-

able. I am juſt returned from London, where I find the average price of three-ſhear *Marſh ſheep* not to exceed 35s.—A friend, who buys a great number every Michaelmas of *three-ſhear Marſh ſheep* to put to turnips in the vicinity of Wakefield and Rotheram, aſſures me, that 35s. is the full average for picking the beſt lots; and an extenſive ſheep farmer near Boſton, informs me, his ewes that miſſed lamb laſt year, were ſold in Smithfield (from Auguſt to Michaelmas) at about 21s. round, and that the higheſt price he got for his *three-ſhear wethers* was 36s. and ſeveral lots ſold under 30s.—His flock are conſidered of the beſt Lincolnſhire breed.

" Some of my neighbours, who have been in the habit of uſing rams of the Diſhley breed, have, for the three laſt years, ſold their *two-ſhear* ſheep in *May*, *(clipped)* for 42s. a head round; another ſold 300 *two-ſhear* ſheep at Michaelmas, in one lot, for 43s. a head, and left only

only 26 culls.—The average weight of the wool of this flock is 9lb. a fleece."

From theſe data a fair compariſon may be made.

Pure Lincolnſhire breed, ſold at *three-ſhear*,

	£.	s.	d.
Three fleeces of wool, 33lb. at 10d. per lb.	1	7	6
Sold at Michaelmas, three-ſhear, for	1	15	6
Divide by 3)	3	3	0
Gives the yearly profit	1	1	0

Croſſed with the Diſhley breed, ſold at *two-ſhear*,

	£.	s.	d.
Two fleeces of wool, 18lb. at 10d.	0	15	0
Sold at Michaelmas, two-ſhear, for	2	3	0
Divide by 2)	2	18	0
Gives the yearly profit	1	9	0

From the above ſtatement it appears, there is a profit of 8s. a head in favour of

the latter; and, ſuppoſing only three ſheep to be depaſtured on an acre, the difference will be 1l. 4s. an acre; but, on the rich marſhes and beſt grazing grounds, the difference will be conſiderably more.

However I am very glad to find, that the prejudices of the Lincolnſhire breeders are now giving way to their better-informed reaſon, as many of the great tup-breeders in Lincolnſhire are now hiring and buying rams from the midland counties; which is certainly the beſt, readieſt, and only method to recover that valuable breed of ſheep, (of which they were firſt in poſſeſſion) and of which they, of any other county of Great Britain, can make the moſt advantage, from having the greateſt quantity of rich ſheep paſturage.

After what has been ſaid, will it not appear very extraordinary, that not only the midland counties, but Yorkſhire, Durham, and Northumberland, can ſend their

their long-woolled breed of ſheep to market at two years old, fatter in general than Lincolnſhire can at three? It is a matter of fact, however, and I have no doubt of clearing it up to the ſatisfaction of my unprejudiced readers in a few words.

The rich fatting marſhes in Lincolnſhire are, beyond any other county I know of in the iſland, beſt adapted to the growing and forcing of long heavy wool. This, with the high price that kind of wool had given, previous to the American war, very probably induced the ſheep-breeders of that county to purſue it ſo ardently in preference to every other requiſite, that they neglected the form of the carcaſe and inclination to make readily fat; *eſſentials*, that the other ſheep-breeding counties were under a neceſſity of attending to, otherwiſe they could not have got them made fat in proper time, from their land not being in general near ſo rich as the Lincoln-

ſhire marſhes. In ſhort, the Lincolnſhire breeders, by running ſo much upon wool and large bones, had got their ſheep like their black horſes, two great ends, a long thin weak middle; and loſt the thick firm barrel-like carcaſe, broad flat back, fine clean ſmall bone, and inclination to make fat;—thoſe diſtinguiſhing characteriſtics of the beſt ſheep, and for which the Diſhley breed is ſo eminently conſpicuous.

The Lincolnſhire ſheep are in general a very tender kind, and unfit for moſt other counties. Whatever croſſes I have ſeen from Lincolnſhire tups, in general did harm; while, on the contrary, the Diſhley ones did great ſervice. It is true, the former moſtly improved the wool in weight, but conſtantly injured the carcaſe in form: The ſheep were longer in making fat, and the mutton worſe in quality.

It is neceſſary to obſerve, that tho' we give the honour of the heavy-woolled ſheep's

ſheep's origin to Lincolnſhire, yet I look upon thoſe to be only variations of the ſame breed, which are ſpread through moſt of our midland counties, particularly Marſhland in Norfolk, the Iſle of Ely, Northamptonſhire, Rutlandſhire, Leiceſterſhire, Warwickſhire, part of Oxfordſhire, Glouceſterſhire, Staffordſhire, Derbyſhire, Nottinghamſhire, and the South parts of Yorkſhire, with all the Yorkſhire wolds: But when we come North towards the river Tees, which divides Yorkſhire from the county of Durham, we there find that largeſt breed of ſheep in this iſland, always called

The TEES-WATER BREED.

This kind differs from the Lincolnſhire, in their wool not being ſo long and heavy, in ſtanding upon higher, though finer-boned, legs; yet ſupporting a thicker, firmer, heavier carcaſe, much wider upon their backs and ſides, and

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in affording a fatter and finer-grained carcaſe of mutton. The two-year old wethers weighing from 25lb. to 35lb. per quarter; ſome particular ones, at four years old, have been fed to 55lb. and upwards.*

There is little doubt but the Tees-water ſheep were originally bred from the ſame ſtock as the Lincolnſhire; but by attending to ſize, rather than wool, and conſtantly purſuing that object, they have become a different variety of the ſame original breed.

This largeſt kind of ſheep is not adapted to live in numerous flocks, or upon bare paſtures; they require good ground,

* Mr Thomas Hutchinſon, of Stockton, an eminent breeder and grazier, had a wether ſheep whhich was killed at Darlington about Chriſtmas, 1779.—The four quarters weighed 17ſt. 11lb. at 14lb. to the ſtone, or 62lb. 4oz. per quarter, with 17lb. of tallow, *(after leaving all they could in the loins)* which is the greateſt weight by ſeveral pounds per quarter, I ever heard of a ſheep weighing.—N. B. He was of the true old Tees-water breed.

depaſturing

depaſturing very few together, or in ſmall parcels, and great indulgence in Winter. Accordingly, we find in that fine tract of country by the Tees, where theſe ſheep are principally kept, the land is in general good, well ſheltered, and cut into ſmall incloſures, where they keep a very ſmall number in the ſame field, allow them to go to a hay-ſtack all the Winter, or to hecks or ſheep-racks in the field, and generally give the ewes corn, previous to, and for ſome time after, their lambing.

The ewes of this breed generally bring two lambs each, and ſometimes three: There are inſtances of even four or five, as was the caſe with Mr Edward Eddiſon's ewe, which, when two years old,

In 1772, brought him 4 lambs.
In 1773, - - - - 5
In 1774, - - - - 2
In 1775, - - - - 5
In 1776, - - - - 2
In 1777, - - - - 2

N. B. The

N. B. The firſt nine lambs were lambed within eleven months.

This breed is at preſent rarely to be found *pure*, except in the poſſeſſion of ſome old breeders; for whoever has made an experiment with the Diſhley breed, find, that though their fleeces are not ſo heavy as the large old breed, yet they obtain more wool from a given quantity of ground, by their being enabled to depaſture more ſheep on the ſame extent of ſurface, and which get much fatter in the ſame time, and produce more pounds of mutton and more pounds of wool from an acre, though much leſs in ſize: In ſhort, *Profit* has overcome *Prejudice*, and very few flocks are now to be found in this diſtrict that have not been croſſed, more or leſs, with the Diſhley blood.

The

The DEVONSHIRE NATTS

have no horns, white faces and legs, thick necks, backs narrow, and back-bone high, the ſides good, legs ſhort, and the bones large.

The average weight of ewes, ... 20lb. per quarter.
Ditto of 2½-year old wethers . . . . . 30lb. Ditto.

The average weight of the wool is 9lb. a fleece,
And ſold in 1792 for 8d. per pound.

Some of the beſt farmers are ſenſible of the ſuperiority of the Diſhley breed, and, laſt year, paid 80 guineas for a ram of this kind, which, I have no doubt, they will find of great advantage.—In this county we alſo find a ſmall breed of long-woolled ſheep, known here by the name of

EXMOOR SHEEP;

ſo called, from being chiefly bred upon, and in the vicinity of, a moor of that name,

name, in the Northern extremity of Devonſhire, and Weſtern part of Somerſetſhire.—They are horned, have white faces and legs, and peculiarly delicate in bone, neck, and head;—the form of the carcaſe not good, being narrow and flat-ſided. The weight of a 2½-year old wether, from 15lb. to 18lb. per quarter, and the weight of the fleece 6lb.

The lambs are ſometimes dropped without horns, but theſe they do not keep for breeders, from an abſurd idea, that they are tenderer than thoſe that have horns.

It is alſo common to ſend the ewes to Exmoor for three or four months in the Summer, while the food laſts and the weather permits; for this they pay 5d. per head: And it is a general remark, that if the lambs did not ſuck upon the moor, to give them a "*Layer*," that they would never ſtay in hogs or old ſheep.—This kind of inſtinct is not peculiar to this breed; we believe it is common to all

all ſheep, to prefer rich and luxuriant paſtures, to a bare-eat, wintery, heathy moor.

The DORSETSHIRE BREED

are moſtly horned, white faced, ſtand upon high, ſmall, white legs, are long and thin in the carcaſe.—The 3½-year old wethers weigh from 16lb. to 20lb. a quarter, produce fine ſhort wool, from 3lb. to 4lb. a fleece, ſold in 1792 for 1s. 2d. per lb. Many have no wool on their bellies, eſpecially in Wiltſhire; the mutton is fine-grained, and well flavoured.

This breed are ſaid to bear lambs twice yearly; but I am inclined to believe this is a miſtake; for, admitting that they may bring lambs twice in one particular year, yet they cannot well do it the next year, or for a ſucceſſion of years; or at leaſt, if they ſuckle their lambs,

lambs, I think they cannot: Becauſe, when it is conſidered that a ewe goes with lamb twenty-one weeks, ſhe muſt, conſequently, have only ten weeks to ſuckle or feed her two different breeds, before ſhe takes the ram again, which will ſcarce ſuffice.* But the peculiar property of this curious breed of ſheep, and what makes them ſo exceedingly convenient and advantageous to breed from, is, that you can have them to lamb at whatever ſeaſon of the year you chuſe, ſo as to have that particular kind of fat lamb called houſe-lamb, which is ſo early found at the tables of the nobility and gentry, and even among our tradeſmen

* Since I wrote the above, I have been informed by a correſpondent, that the Dorſetſhire ewes are capable of bringing lambs twice a year; becauſe my friend tells me, from a peculiarity in their conſtitution, they will take the ram two days after lambing, but do not conceive; but eight or ten days after they have a ſecond embrace, when they generally prove with lamb, notwithſtanding they give ſuck at the ſame time.

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in theſe luxurious times, and which are brought to London market by Chriſtmas, or ſooner if wanted, and after that a conſtant and regular ſupply is kept up all the Winter. At their firſt appearance they are frequently ſold for half-a-guinea, fifteen ſhillings, and ſometimes more per quarter; from which time they lower gradually in price, until the Spring affords plenty. The lambs are impriſoned in little dark cabins, where they never ſee the light, except when the ſhepherd ſuckles them upon the ewes.—The ewes are fed with oil-cake, hay, corn, turnips, cabbages, or any other green food which that ſeaſon affords; theſe are given them in an incloſure contiguous to the lamb apartment, where, at proper times, the attendant brings the nurſes, and, while the lambs ſuck, their lodgings are made perfectly clean and littered with freſh ſtraw. Vaſt attention is paid to this, for very much depends upon cleanlineſs. Thus are invention

and induſtry exerted to the utmoſt, to ſupply the wants of luxury.

It uſed to be ſaid ſome years ago, that this moſt ſingular breed of ſheep would not bring lambs ſo early, except in the Southern parts of England, and that it was much owing to a particular mode of treatment, practiſed by the ſhepherds and breeders in Dorſetſhire and the neighbouring counties, ſuch as heating the ewes by driving, &c. and then turning the rams to them.—Others again aſſert, that it was owing to the particular herbage produced from the Dorſetſhire downs. But theſe imaginary notions are now all exploded, becauſe it is well known that York, Durham, Newcaſtle, and even Edinburgh, are of late years ſupplied with Chriſtmas houſe-lamb from the Dorſetſhire ſheep, without any particular arts being made uſe of.

I take the Wiltſhire ſheep to be only a variety of this breed, which, by attending to ſize, have got conſiderably more weight,

weight, viz. from 20lb. to 28lb. a quarter.—Theſe, in general, have no wool upon their bellies, which gives them a very uncouth appearance.

The variations of this breed are ſpread through many of the Southern counties, as well as many in the Weſt, viz. Glouceſterſhire, Worceſterſhire, Herefordſhire, &c. though ſome of them are very different from the Dorſetſhire, yet they are, I apprehend, only variations of this breed, by croſſing with different tups, and which variations continue Northward until they are loſt amongſt thoſe of the Lincolnſhire breed.

They have a particular breed of ſheep, moſtly horned, in that Weſtern part of Yorkſhire called Craven and Wenſleydale, and Silverdale in Weſtmoreland. I know not which breed to annex them to, but think they have a good deal of the Dorſetſhire in them, eſpecially their horns and white faces, probably produced by croſſing the Dorſetſhire and Cheviot

viot breeds.—The wool ſells for 10d. per lb.

The HEREFORDSHIRE BREED

have no horns, white legs and faces, with wool growing cloſe to their eyes, carcaſe tolerably well formed, weighing from 10lb. to 18lb. a quarter, have very fine ſhort wool, from 1½lb. to 2½lb. a fleece,* ſold in 1792 for 2s. 9d. a lb.;—the mutton excellent.

The following particulars reſpecting this breed of ſheep were communicated to the late worthy baronet, Sir Charles Turner, in anſwer to ſome queries propoſed by him:—

"The lambs, when weaned from the ewes about Midſummer, are put upon

* The ſheep that have the fineſt wool are kept *lean*, and produce 1½lb. each; if better kept, they grow larger, and produce more wool, but inferior in quality.

old

old clover and rye-graſs, or dry paſture-land, and wintered the ſame, except in ſnow or very ſevere weather, when they have a little hay or peaſe-halm.

" The wethers are generally put from the ſtore-ſheep at Michaelmas, when they are paſt three years old, kept well in the Winter, and ſlaughtered fat the next Summer at four years old. Some turn them to feed ſooner, but that is when the ſtock is too large for the keep. The ſheep certainly feed better at four years old than ſooner, and the fleſh better; indeed they are put to feed at any time of the year that ſuits the owner, but ſhould be near fat before Winter, (or turned off to feed as above); then they are put to turnips or good dry paſture, and changed often; ſometimes kept in the houſe, and fed with hay and oats, with ſome water always in a trough by them; which laſt is expenſive, but the mutton excellent, the weight of the fleſh from 50 to 80 pounds. A Ryeland ſheep that will

weigh 50lb. when good fair mutton, is often fed till he weighs 80lb.

"The ſtore-ſheep, (except yearlings and two-year-olds, upon the corn-farms, and where the wool is fineſt) are put in the ſheep-cot by night, and all the year round, and their cratches filled with peaſe-halm, wheat-ſtraw, barley-ſtraw, or any other dry food, which they eat and make dung of; the dung enables the farmers to raiſe good crops of barley, &c. and the ſheep paſture by day on old clover and rye-graſs, dry paſture, fallow, ſtubble, &c. but are always kept very lean, and graze quite ſhort: When there is not convenience of putting them in the ſheep-cot by night, all the year, they do it from the beginning of Winter till April or May, when the lambs are able to lie out by night. The ewes muſt be kept in by night at the yeaning time, and when the lambs are very young, or the cold nights will kill the lambs, their wool is ſo very ſhort; but if they are healthy

healthy, at a week or fortnight old, they will bear to be out at night.

"The ſheep are paſtured upon commons, open fields, or incloſures, provided the land is dry and healthy for ſheep, and when there is no conveniency of putting them in a ſheep-cot by night at yeaning time. The ſheep muſt not be quite the fineſt ſort of wool, but mixed with a ſtronger wool; it will then be more in quantity, though about 2d. a pound leſs in value.—If the ewes can be out of doors, the lambs bear the cold better; but if they cannot be put in the houſe at that time, ſhould be ſeen often, and put where they are beſt ſheltered from the cold."

Mr Pye, a Herefordſhire farmer, alſo told me, that the ſtore or keeping-ſheep are put into cots at night, Winter and Summer, and in Winter foddered in racks with peaſe-halm, (ſtraw) barley-ſtraw, &c. and, in very bad weather,

with hay. Theſe cots are low buildings, quite covered over, and made to contain from one to five hundred ſheep, according to the ſize of the farm, ſheep-walk, or flock kept. The true Herefordſhire breed are properly called Ryeland ſheep, from the land formerly being thought capable of producing no better grain than rye, being a tract of very poor land, but now found capable of producing almoſt any kind of grain.

The SOUTH-DOWN BREED

have no horns, grey faces and legs, fine bones, long ſmall necks, low before, high on the ſhoulder, and light in the fore-quarter; the ſides good, loin tolerably broad, but the back-bone too high; the thigh full, and twiſt good; very cloſe, fine, ſhort wool, from 2½lb. to 3lb. a fleece, ſold in 1792 for 2s. per lb.; the length of the ſtaple from 2 to 3 inches. Average weight of two-year old wethers, 18 lb.

18lb. per quarter;—the mutton fine in the grain, and of an excellent flavour.

Theſe ſheep ſtand higher behind than before, and the hind-quarters are generally heavier than the fore-quarters, which, in Suſſex, (the diſtrict they are bred in) is eſteemed a merit, as the butchers ſell the former at full one penny per lb. more than the latter, a ſingularity that we believe is peculiar to this diſtrict; for, in all the other markets we have ſeen, the hind-quarters, and particularly the legs, are ſold for a halfpenny a pound leſs than the fore-quarters. This breed of ſheep being hardy and ready feeders, we hope the defect will be remedied in a few years, and other improvements made by the attention and exertions of enterpriſing breeders, particularly the ingenious Mr Elman, of Glynd, whoſe flock is already ſuperior to moſt of his neighbours, both in carcaſe, quantity, and quality of wool.

The lambs are moſtly dropped from the

the middle of March to the end of April, and are well covered with wool when dropped; one-third of which will be twins, if the ewes have been well kept.

The diſtricts where theſe ſheep are bred are very dry chalky Downs, producing ſhort fine herbage. The wethers are ſeldom kept to more than two years old; many feed them at 18 months.—The ewes are moſtly ſold at four and a half years old, to graziers, in the Wealds of Suſſex and Kent, who fat both lamb and ewe the next Summer, but of late years they have had a better market in other counties, particularly Suffolk and Norfolk, where they are found (by thoſe who have tried them) to anſwer much better than their own breed of Norfolk ſheep, being quicker feeders, and equally hardy for bearing the fatigues of folding.

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The NORFOLK BREED

have black faces, large ſpiral horns,* very ſmall, long, thin, weak carcaſes, with narrow chines, weighing from 16lb. to 20lb. per quarter, very long black or grey legs, and large bones; the wool ſhort and fine, from 1¼lb. to 2lb. per fleece, ſold in 1792 for 1s. 5d. per lb.

The mutton is fine-grained and high flavoured, but will not keep ſo long in hot weather as ſome other kinds: They have a voracious appetite, a reſtleſs and unquiet diſpoſition, which makes them difficult to be kept in any other than the largeſt ſheep-walks, commons, or fields.

This breed of ſheep is the moſt prevalent in Norfolk and Suffolk, and ſeems to have been purſued, ſolely for the pur-

* The horns of ſome of the Norfolk and Suffolk rams meaſure 36 inches long, following the turn of the horn; and 9½ inches round at the root, or ſetting-on at the head.

poſe

poſe of folding; as it does not appear they have any other good property to recommend them, beſides being good travellers, for which they ſeem well adapted, from their very long legs and light lean carcaſes, which, with their very large horns and long low necks, give them an appearance altogether uncouth, and ſo totally different from the polled ſheep with long wool, that a perſon who had been accuſtomed to ſee no other, would, on the firſt ſight of a flock of Norfolk ſheep, take them for a ſpecies of deer rather than ſheep.

There are, probably, few diſtricts where there is ſo much room for improvement of ſheep-ſtock as in Norfolk; and I am glad to find, that the Diſhley and South-Down Breeds have been introduced, and ſucceed ſo well, as to be in a fair way of ſupplanting the Norfolks.

Mr Coke, of Holkham, has diſpoſed of his flock of Norfolks, from an entire conviction, on long experience, that they

are

are a moſt unprofitable breed;* he finds, that if folding be neceſſary or profitable, (which, by-the-bye, is doubtful) the Diſhley breed will bear this operation very well, having had a large part of 60 acres of wheat folded with them in 1792.

In compariſon with South-Down ſheep, an equal number of each ſort were kept together from lambs, and when ſold in Smithfield market at two years old, the South-Down gave ſeven ſhillings a head more than the Norfolks. The fleece of the South-Downs is nearly 1lb. heavier; and Mr Bevan's ſhepherd ſays they are hardier, and will eat what the Norfolks refuſe, are ready to go to fold ſooner, are more quiet and obedient than Norfolks, and that he could fold them almoſt to an inch without hurdles; that laſt year he would not let his own ewes take the South-Down rams, but

* Annals of Agriculture, vol. 19.

this

this year was ready enough to do it;* the prejudices of an old ſhepherd giving way in this manner, is a deciſive argument againſt his own breed of Norfolks.

The ewe flock of this breed of ſheep are wintered at a great expence, the common allowance being an acre of turnips to ſix ſheep, beſides hay, rye, and depaſturing on the ſheep-walk, which is often well ſtocked with ling or furze: By valuing the turnips only at 3l. an acre, and the allowance of hay, &c. at 2s. per head, the expence of wintering will be 12s. per ſheep.

Mr Young, in his Agricultural Report of Suffolk, ſtates, that the annual return in lamb, wool, and folding, is, for the beſt flocks, 13s. per head;† but the ave-

* Annals of Agriculture, vol. 19.

† | | s. | d. |
|---|---|---|
| Lamb - - - | 10 | 0 |
| Wool - - - | 1 | 4 |
| Folding - - - | 1 | 6 |
| Annual return - | 12 | 10 |

The price of crones or draft ewes is from 10s. to 11s.

rage

rage of the county is not more than 10s. from which it appears, they are kept all the Summer for nothing, or ſomething worſe.

This expence of wintering, we believe, is unknown amongſt the owners of every other breed of ſheep in the kingdom.

The HEATH BREED

have large ſpiral horns, black faces, and black legs, a fierce wild-looking eye, and ſhort firm carcaſes, (weighing from 12lb. to 16lb. a quarter) covered with long, open, coarſe, ſhagged wool; the fleeces weigh from 3lb. to 4lb. each, and ſold in 1792 for 6d. per lb.

They are an exceedingly active and hardy race, run with amazing agility, and ſeem the beſt adapted of all others to high, expoſed, *heathy*, mountainous diſtricts. They are ſeldom fed until they are three, four, or five years old; at which

which age they feed well; the mutton is excellent, and gravy high flavoured.

This hardy wild-looking tribe are firſt met with in the North-weſt of Yorkſhire, and are in poſſeſſion of all that hilly or rather mountainous tract of country adjoining the Iriſh Sea, from Lancaſhire to Fort-William. Indeed their introduction into the Weſtern Highlands of Scotland, has been only of late years; nor is there the leaſt doubt of their anſwering equally as well in the mountains of Argyleſhire, as in thoſe of Weſtmoreland and Cumberland; for it is well known, that the climate is pretty much the ſame in all that rugged coaſt, having almoſt uninterrupted rains and ſtrong winds.—Indeed the Galloway and Ayrſhire ſheep are in ſome degree different; but I take them to be only a variation, probably from croſſes between theſe and the Cheviot ſheep. But, within theſe few years, they have in thoſe two counties been making ſome trials of that moſt uſeful kind

kind of ſheep, beſt known by the name of the Diſhley Breed; and every friend to his country will be glad to hear, that they have hitherto ſucceeded beyond expectation. Nor will any perſon converſant with breeding ſheep be ſurpriſed at this; becauſe they are in every reſpect as well or better calculated to thrive in the flat country and lower hills, as the black-faced ones are for the mountains.

As theſe ſheep are ſo well adapted for lingy* or heathy mountains, and cold expoſed ſituations; what a pity they are not covered with a finer and more valuable fleece! There is no doubt but it might be improved; indeed it is ſcarce poſſible to make it coarſer. Some trials from the Diſhley Breed have been made about Moffat, in Annandale, at the requeſt of that patriotic Nobleman the

* By *Ling* is meant *Erica vulgaris*, *Heath* or *Heather*, a plant uſed for thatching houſes; and not *Scirpus cæſpitoſus*, which the Cheviot ſhepherds call *Ling*.

Earl of Hopetoun; but I am very ſorry to hear, that, notwithſtanding the influence and earneſt ſolicitations of his Lordſhip, the breeders are ſo exceedingly averſe to it, that they do, and ſay every thing they can, to leſſen the merit of theſe trials, and, like all ignorant people, are quite prejudiced againſt every kind of ſheep except their own.

The Heath Sheep have been tried in thoſe remote parts to the North of the Murray-Firth, viz. Roſsſhire, Sutherland, and Caithneſs, and have anſwered very well. The Cheviot ſheep have alſo found their way into thoſe diſtricts;—which of the two breeds will be found the moſt advantageous and beſt adapted for theſe Northern regions, time and fair experiment will diſcover. There is little doubt but that either of them will be found better than the dun-faced kind, hereafter deſcribed, and the only ſheep known in the Highlands until of late years.

The

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The HERDWICK BREED

have no horns, their faces and legs ſpeckled; but a greater portion of white, with a few black ſpots, are accounted marks of the pureſt breed; they have fine, ſmall, clean legs; wool, ſhort; the fleeces from 2lb. to 2½lb. each, ſold in 1792, for 6d. per lb.

The ewes weigh from ..... 6lb. to 8lb. per quarter.
The wethers at 4½ years old from 9lb. to 11lb. per quarter.

This breed of ſheep is peculiar to that high, expoſed, rocky, mountainous diſtrict, at the head of the Duddon and Eſk rivers, in the county of Cumberland, more particularly known by the names of Hardknot, Scalefell, and Wreynoſe.—They have a thick matted fleece of ſhort wool, which, tho' coarſer than that of any of the other ſhort-woolled breeds, is yet much finer than the wool of the

black-faced heath ſheep, with which variety they ſeem to have been croſſed, as we ſuſpect, from ſome of the rams having ſmall horns, and from ſome kempy hairs being intermixed amongſt the wool.

They are a lively little animal, well adapted to ſeek their food amongſt theſe rocky mountains, in many places ſtony and bare; and where covered, the ſoil is thin, but the herbage moſtly green, intermixed with heath, eſpecially on their ſummits.

They have no hay given them in Winter, but ſupport themſelves in the ſevereſt ſtorms, and deepeſt ſnows, by ſcratching down to the heath or other herbage; indeed it ſeldom happens but that ſome parts of the mountains are blown bare, which the ſheep find out.—They do not face the coming ſtorm, as reported, but, like other ſheep, turn their backs on it, and in ſuch weather they generally gather together, and keep ſtirring

ring about; by which means they tread down the ſnow, keep above it, and are rarely overblown. The loſs per cent. per ann. is of hogs from 5 to 10—of old ſheep from 2 to 5.

The Spring in this ſituation is late, on which account they do not chuſe to have their ewes to lamb before the beginning of May; the lambs when dropped are well covered with wool.

The ewes are kept as long as ever they will breed lambs, and are often from *ten* to *fifteen* years of age before they are ſold.—The wethers go off at four and a half years old; and both are ſold to the butchers and killed from off theſe mountains, without being put upon any better paſture.

The mountains upon which theſe ſheep are bred, belong to Lord Muncaſter, as do alſo the ſtock that depaſture them; which have, time immemorial, been farmed out to *herds* at a yearly ſum. From this circumſtance, theſe farms

(three or four in number) have obtained the name of *Herdwicks*; that is, the diſtrict of the *Herds*, and the ſheep the appellation of *Herdwick ſheep*. They have gained ſuch a character for hardineſs of conſtitution, that Mr Tyſon, who farms the principal flock, ſells a number of tups every year *(to improve the hardineſs of other flocks)* into various parts of the adjoining counties.—The price is often as high as *two guineas and a half*.

The CHEVIOT BREED

are hornleſs, the faces and legs in general white; the *beſt kinds* have a fine open countenance, with lively prominent eyes; body long, fore-quarter wanting depth in the breaſt, and breadth both there and on the chine; fine clean ſmall-boned legs; thin pelts; weight of carcaſe when fat, from 12lb. to 18lb. per quarter; fleeces from 2½lb. to 3½lb. each; and ſold in 1792 for 11d. per lb.

The

The wool is not all fine, there being in a fleece of 3lb. weight, only 2lb. of fine wool, worth 1s. per lb. (when the whole fleece ſells at 10d. per lb.) and 1lb. of coarſe wool worth only 6d. per lb.

Some of the Cheviot ſheep are ſpeckled on the face and legs, but thoſe are, probably, a mixed breed, from croſſing at different times with the heath ſheep, to whom they have been long neighbours; for, as you leave the heights of Annandale to the Eaſtward, you inſenſibly loſe the Heath ſheep and mixed breed, after which, all thoſe extenſive fine green hills on the Scotch and Engliſh Borders, (extending from Reedwater, on all ſides the mountains of Cheviot, to the barren Heaths of Lammer-moor) are covered with the Cheviot Breed.

The *beſt kind* of theſe ſheep are certainly a valuable mountain ſheep, where the *paſture is moſtly green ſward*, or contains a large portion of that kind of herbage; which is the caſe with all the

hills around Cheviot, where thoſe ſheep are bred, and the fine herbage which the Border hills everywhere produce, ſupports them ſo well in Summer as to enable them to ſtand the ſeverities of Winter the better.

The ſhape of this breed of ſheep has been much improved of late years; but all thoſe who have been aiding in making theſe improvements, readily acknowledge, there is ſtill much to do, eſpecially to the fore-quarter, which they all agree is very defective; but we hope it will not long remain ſo, as we think we ſee a ſpirit of inveſtigation ariſing amongſt theſe breeders, that in a few years will remedy, not only this defect, but will diſcover others, which at preſent they are not willing to admit.

But as knowledge is progreſſive, we cannot expect the perfection of this breed of ſheep can be obtained at once; it muſt proceed by ſlow gradations, as every other improvement hath done; it

is

is a great point gained, that we admit defects, and are desirous to amend them.

That breed of sheep which brings the most profit to the farmer will always be pursued by him, whatever his situation; but that object is not to be obtained in this district from *fine wool alone.*—Perfect mountain sheep should be *hardy*, *well formed*, and *quick feeders.* These qualities will always recommend them to the grazier, who will never purchase a slow-feeding animal, while he can get one of a different sort, tho' at a considerable advanced price. But if to these qualities, so essential to the sale of a mountain farmer's stock, can be added a *fleece of fine wool*, a breed of sheep would then be obtained, the propereſt for a hilly district, of any we have yet seen.* There is little doubt but this may be accomplished

* It is not the value per *lb.* which constitutes the farmer's profit, but the value per *fleece*; or rather, that breed is *the best* that brings the *most profit, in fleece and carcase jointly*, from the same ground, in equal times.

by

by *proper ſelection*; and, probably, the *beſt kind* of Cheviot ſheep, from their hardineſs, and producing a portion of fine wool, are the propereſt ſtock for laying the foundation of ſo deſirable an improvement.

The mode of management amongſt the ſheep farmers of theſe hills is, to divide their flocks into different parcels, viz:—*Lambs*, *hogs*, *gimmers*, *ewes*, and *wethers*; and to keep each parcel upon ſuch paſturage as is thought to be moſt proper for them: Every parcel is attended by a ſhepherd, who is bound to return the number of ſheep delivered to him, either alive, or in his account of dead ſheep, which are in general ſold at different prices according to their goodneſs. They have no other food but what their paſtures produce, except in deep ſnows a little hay is given them.—The ewes are not ſuffered to breed until they are 3 years old, and at $4\frac{1}{2}$ are ſold for about 13s. per head to graziers, who feed

feed both them and their lambs next Summer, the profit from 12s. to 15s. for keeping one year on graſs. The wethers are ſold at 3½ years old, for 14s. or 15s. each; and after keeping near 12 months on graſs, leave a profit from 10s. to 12s. each.

It has been an old and general practice to milk the ewes of this breed of ſheep, for eight or ten weeks, after the lambs are weaned; from this milk, great quantities of cheeſe are made, and ſold for about 3d. per lb.; when kept to three or four years old, it is exceedingly pungent, and on that account, ſome people prefer it to cheeſe of a much better quality.

To milk ewes for two or three days after the lambs are weaned, is a uſeful practice; but when continued for eight or ten weeks, it becomes very detrimental, keeps the ewes lean, and ill prepared for meeting the ſeverities of Winter. The profits of milking ewes for eight or ten

ten weeks are eſtimated at 8d. per ewe, and they are decreaſed in value at leaſt 1s. 6d. per head, as is generally agreed by the moſt conſiderable and intelligent hill farmers, amongſt whom the practice is going very faſt into diſuſe, and in a few years will probably be totally laid aſide.

All the low parts of Northumberland have a mixed breed of ſheep between the Cheviot, Tees-water, and Lincolnſhire; —in general a very tender, ill-formed, unprofitable breed, though much better than the kind they formerly had, which were called Mugs, from the wool growing into their very eyes. Some remnants of this breed that I have ſeen, have their wool ſo grown about their eyes, that the poor animals could ſcarce ſee to eat or pick out the graſs. This mug or muff, by every breeder and grazier of experience in theſe days, is looked upon as a certain indication of a ſoft, tender, ſlow-thriving ſort. However, ſince the

Diſhley

Diſhley breed has made its way into Northumberland, their ſheep are very much improved; and they can now, not only make them fat at an earler date, but help to ſupply Newcaſtle, Shields, and Sunderland, and all their populous environs, with as fat mutton as either the county of Durham or Yorkſhire; and a vaſt number of fat ſheep from the North,* (as well as lambs in the ſeaſon) are weekly ſold in Morpeth, which, perhaps, ranks the third market in England for quantity of ſtock ſold, weekly or annually; Smithfield firſt, Wakefield ſecond,† Morpeth third.

* From the North parts of this improving county, and both ſides the Tweed, the natives of Scotland not having yet learned to eat fat mutton like the pitmen and keelmen about Newcaſtle, induces the Borderers to ſend their fatteſt mutton to Morpeth market, rather than to Edinburgh, where the conſumption of mutton is very ſmall, compared with what it is at Newcaſtle, though pretty much increaſed of late years.

† It is thought by many that Rotherham fat-market now begins to rival Wakefield; it is held every Monday, and has encreaſed very much of late.—Wakefield is on the Wedneſday, and held only once a fortnight.

The

The wool of this country, for want of home-manufactures, either goes to Scotland, even as far as Aberdeen and Peterhead, or into Yorkſhire, to Leeds, Bradford, &c. to the latter moſtly by land-carriage: But what is moſt extraordinary, a part of this wool, after being combed at Darlington, Leeds, &c. returns into Scotland to be ſpun; then is conveyed back to be made into ſtuffs, a part of which once more returns to Scotland for the people to wear. However, the induſtrious North-Britons are now eſtabliſhing woollen manufactures in every corner, which, I am well informed, are patriotically ſupported by the firſt nobility in Scotland; and it were to be wiſhed that the nobility and gentry in Northumberland would imitate ſo laudable an example. Such eſtabliſhments would in all probability very ſoon prevent theſe very expenſive and tardy conveyances.

On both ſides the Tweed the ſheep are much the ſame; but continue to grow worſe

worſe Northward, until we reach the extent of barren country called Lammermoor, where they ſeem a mixture between the Cheviot and Heath kinds, but moſtly inclined to the latter. From hence, all along that fine coaſt called the Lothians, you meet with no ſheep except a few to breed fat lambs for Edinburgh market:—For, our Northern neighbours ſeem to have full employment for all their level fields to produce corn for home-conſumption. Even Fifeſhire, Angus, and the Mearns, afford few of thoſe innocent creatures: And when we aſcend the Grampian Hills, we do not find them ſo plentifully ſtocked with ſheep, as the Southern hills of Scotland. Every one who has viſited theſe mountains, muſt have perceived this to be owing to the paſturage being worſe in quality and leſs in quantity than the Southern hills.—It is here, however, that we firſt meet with

The

The DUN-FACED BREED

have no horns; the faces, in general, of a dun or tawny colour, and wool variouſly mixed and ſtreaked, black, brown, red, and dun, ſome of which is very fine; their tails ſhort, and ſize remarkably ſmall, many of them weighing no more than 6lb. or 7lb. a quarter; the mutton excellent.

Probably this breed is deſcended from, or croſſed by, ſheep, that might be introduced when the Spaniſh Armada ſuffered upon theſe coaſts; a breed of this kind being found in Spain, as appears by the information I lately received from Matthew Stephenſon, Eſq; of Breaks-Hall, in Weſtmoreland, (a gentleman whoſe attentive obſervations, when abroad, do him the greateſt honour) which ſeems to put this matter almoſt out of diſpute,—he ſays, "When in Spain, I "ſaw in Andaluſia, exactly the ſame "kind

" kind of ſheep you deſcribe, under the " title of the Dun-faced ſheep, and " which the Spaniards call *Ovejas Ma-* " *rinas*, of whoſe wool, I was told, the " fine Segovian cloths are made; this " wool is reckoned the fineſt in the " world, excepting perhaps the Vigo- " nian wool of Peru, and the Caſſime- " rian wool, of which the fineſt turbans " are made."

I am inclined to think them too tender and delicate a breed for theſe mountains, and ſhall not wonder if they are, in a few years, driven out by that hardy race of mountaineers before deſcribed, under the title of Heath Sheep, or more probably by the Cheviot Sheep, from the exertions now making by the Britiſh Wool Society, to introduce them into thoſe diſtricts on account of the ſuperior quality of the wool.

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are generally hornleſs, and are peculiarly diſtinguiſhed by the unuſual ſhortneſs and ſmallneſs of their tails; they weigh from 7lb. to 10lb. a quarter; wool from 1lb. to 3lb. a fleece, very fine, and of various colours.

It appears from an account addreſſed to the Britiſh Wool Society, by Mr Thomas Johnſton, that there are two varieties of Shetland ſheep; —from his Report the following extracts are collected:

One of theſe varieties carry coarſe wool above, and ſoft fine wool below, and have three different ſucceſſions of wool yearly; two of which reſemble long hairs more than wool, and are termed, by the common people, *fors* and *ſcudda*.—When the wool begins to looſen at the roots, which generally happens about

bout the month of February, the hairs or *ſcudda* ſpring up; and when the wool is carefully pulled off, the tough hairs continue faſt, until the new wool grows up about a quarter of an inch in length, then they gradually wear off; and when the new fleece has acquired about two months growth, the rough hairs, termed *fors*, ſpring up, and keep root, until the proper ſeaſon for pulling it arrives, when it is plucked off along with the wool, and is ſeparated from it at dreſſing the fleece by an *operation* called *forſing*.—The *ſcudda* remains upon the ſkin of the animal, as if it were a thick coat, a fence againſt the inclemency of the ſeaſons, which provident Nature has furniſhed for ſupplying the want of the fleece.

The native or *kindly breed*,* which bear the ſoft *cottonny fleeces*, (as they are called) are rather of a delicate nature; their wool is ſhort and open, and deſtitute of a

* I take this breed to be only a variety of the Dun-faced Sheep, before deſcribed.

covering of long hairs.—Theſe ſoft-woolled fleeces are very often loſt or rubbed off during the Winter or early in the Spring, which, it is ſuppoſed, might be prevented by clipping or ſhearing the ſheep, in place of pulling off the wool; a barbarous practice, tending to weaken the ſheep, and hurt the length of the ſtaple.

The Shetland ſheep are of various colours; the ſilver-grey wool is thought to be the fineſt and ſofteſt, but the black, the white, the mourat or brown, is very little inferior; it is all of the ſofteſt texture, fit for the fineſt manufactures, and, in ſome inſtances, has been found to rival Spaniſh wool itſelf; but the pure white is generally the moſt valuable for all the finer purpoſes in which combing-wool can be uſed: For ſoftneſs and for luſtre no wool equals it; and the ſkin, with the fleece on, can be converted into a fur of very great value; ſome ſpecimens

mens of which have been already ſent to the China market.

They are in general very hardy, and of a much wilder temper than any other I have been acquainted with. In the Winter ſeaſon, and eſpecially while the ground is covered with ſnow, they eat the ſea-weed very greedily; and often, during long and ſevere ſnows, they have little elſe to live on. Nature ſeems to have imparted to them a perfect knowledge of the times at which this food may be procured; for, immediately upon the tide beginning to fall, the ſheep, in one body, run directly down to the ſea-ſhores, although feeding on hills ſeveral miles diſtant from the ſea, where they remain until the tide returns, and obliges them to ſeek their uſual haunts.

HAVING now gone through the different breeds of Britiſh Sheep, I ſhall beg leave to add a few words on

The IRISH SHEEP;

a pretty large ſample of which I ſaw at the great fair of Ballinaſloe, where the collector of the tolls told me that there were 95,000 ſhewn at that time, and that there had often been more. But I am ſorry to ſay I never ſaw ſuch ill-formed ugly ſheep as theſe; the worſt breeds we have in Great Britain are by much ſuperior. One would almoſt imagine that the ſheep-breeders in Ireland have taken as much pains to breed plain aukward ſheep, as many of the people in England have to breed handſome ones. I know nothing to recommend them except their ſize, which might pleaſe ſome old-faſhioned breeders, who can get no kind of ſtock large enough. But I will endeavour to deſcribe them, and leave my readers

readers to judge for themſelves.—Theſe ſheep are ſupported by very long, thick, crooked, grey legs; their heads long and ugly, with large flagging ears, grey faces, and eyes ſunk; necks long, and ſet on below the ſhoulders; breaſts narrow and ſhort, hollow before and behind the ſhoulders; flat-ſided, with high narrow herring-backs; hind-quarters drooping, and tail ſet low. In ſhort, they are almoſt in every reſpect contrary to what I apprehend a well-formed ſheep ſhould be; and it is to be lamented, that more attention has not been paid to the breeding of uſeful ſtock, in an iſland ſo fruitful in paſturage as Ireland. Indeed the ſame Mr Trenches mentioned before, and ſome other ſpirited breeders, have, at very great expence and hazard, imported both bulls, tups, and ſtone-horſes from England; and very great improvements have already been made from theſe croſſes. I ſaw ſome of the deſcendents of theſe ſheep from the Eng-

liſh rams at the above fair; and it is both extraordinary and pleaſing to ſee how much they exceeded the native breed. But a very great bar is put in the way of theſe iſlanders, to the improvement of their ſheep: The ſame law is in full force againſt exporting ſheep into Ireland, as into France, or to any of our natural enemies on the Continent. I think it is a real hardſhip, that this diviſion of his Majeſty's ſubjects cannot have the benefit of improving their breed of ſheep, without ſmuggling them over. Application was made to Lord Harcourt, when Lord Lieutenant of Ireland, for leave to ſend rams over to Ireland from England, offering very high ſecurity, three or four times the value of the ram, for his being returned into England, or, in caſe of death, a proper certificate to be produced along with his ſkin, ear-marks, &c. but without effect. However, to ſhow that the fault is not in the Iriſh breeders, but, on the contrary,

ry, to prove that they are exceedingly deſirous to improve their breeds of ſtock, by the help of thoſe from this iſland, even at an expence that many of our breeders in Great Britain would grumble at, I will lay before my readers an authentic account of a ſtone-colt and ſome ſheep ſold at Ballinaſloe fair, in the county of Galway, in Ireland, which was given by Mr Trench, a gentleman of fortune and character who lives in the neighbourhood of Ballinaſloe, to a particular friend of mine, who was ſo kind as to preſent it to me.—They were ſold by auction, in ſmall lots, the 5th of October, 1770.

	£.	s.	d.
66 ewes, ſold to different people, amounted to	1094	5	5
9 rams, - - - -	352	12	6
5 ram-lambs, - - - -	29	0	1½
1 ſtone-colt, 3 years old, - -	170	12	6½
Total £.	1646	10	6½

One

One of theſe rams was ſold to Col. Pearſe at	52 Guineas
2 ewes to John Bodkin at - - -	46
2 ditto to Bar. Rochfort at - -	43
2 ditto to Col. Pearſe at - - -	40
2 ditto to Mr Blake at - - -	40

Since Mr Trench gave the above account to the gentleman from whom I had it, I have had the pleaſure of ſeeing him in Ireland; I alſo met with Mr Johnſon, brother to the perſon that ſold the above goods, who gave me the ſame relation of this affair as Mr Trench did.

SWINE.

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SWINE.

SWINE are the *fourth* kind of domeſtic animals which we deſign to treat of. Theſe creatures, though in many reſpects diſagreeable, are of conſiderable importance to the community at large, and to farmers in particular; and, in no inſtance perhaps, has Nature ſhewn her œconomy more than in this race of animals, whoſe ſtomachs ſeem a receptacle for every thing which other creatures refuſe, and which, but for theſe, would be often entirely waſted. They induſtriouſly gather up, and greedily devour, what would otherwiſe be trodden under foot

foot and waſted.—The refuſe of the fields, the gardens, the barns, and the ſcullery, to them is a feaſt.

The moſt numerous breed of hogs in this iſland, is that kind generally known by the name of

The BERKSHIRE PIGS,

now ſpread through almoſt every part of England, and ſome places of Scotland.—They are, in general, of a reddiſh colour, with black ſpots upon them, large ears hanging over their eyes, ſhort legged, ſmall boned, and inclined to make fat.—The ſurpriſing weight that ſome of theſe hogs have been fed to, would be altogether incredible, if we had it not ſo well atteſted.—Mr Young, in one of his Tours, gives an account of one in Berkſhire, which was fed to eighty-one ſtone ſome odd pounds, which I had often before heard of when in the South of England. But I was ſome time ago favoured by

by a correſpondent, with an account of an extraordinary pig which was killed in Cheſhire;—I will beg leave to tranſcribe it in his own words: "On Monday, the 24th of January, 1774, a pig, (fed by Mr Joſeph Lawton, of Cheſhire) was killed, which meaſured, from the noſe to the end of the tail, three yards eight inches, and in height four feet five inches and a half: When alive, it weighed 12 cwt. 2 qrs. 10 lb.; when killed and dreſſed, it weighed 10 cwt. 3 qrs. 11 lb. or 86 ſtones 11 lb. avoirdupoiſe.—This pig was killed by James Waſhington, butcher in Congleton, in Cheſhire."

There was a breed of large white pigs, with very large ears hanging over their eyes, which a few years ago were very common in many parts of Yorkſhire and Lancaſhire. They were very plain, thin, aukward hogs, with very long legs; but what diſtinguiſhed them moſt, was two wattles or dugs, not unlike the teats of a cow's udder, which hung down from their

their throats, one on each ſide. But this unprofitable kind has now, almoſt everywhere, given place to the more valuable breed which we have juſt been ſpeaking of.

The Chineſe or Black Breed,

will always be valuable; for though they do not feed to any great weight, yet they fatten amazingly faſt, and afford the ſweeteſt bacon; which has gained the preference everywhere amongſt the nice-eating people. Indeed thoſe that have not been accuſtomed to the very fat bacon in the ſouthern and midland counties, the very ſight of it is enough to a perſon with a very delicate ſtomach, who cannot behold the very fat part of it without almoſt ſickening, while the people in thoſe counties eat it at all times of the day: I have frequently ſeen them breakfaſt upon it.

The black breed are deſervedly in great

great eſteem, and would be much more ſo if they were not ſuch a miſchievous race; for, the moſt attentive herding (or tenting as they call it in ſome parts of the South) can ſcarcely keep them from your fields of corn, peaſe, or potatoes; nothing will ſecure them, except walls or good paling.

I know of only one other breed of pigs in theſe iſlands that I have obſerved, and theſe are

The Highland or Iriſh Breed,

a kind no otherwiſe worth naming but for diſtinction's ſake; for, I am perſuaded, whoever is acquainted with the Berkſhire or Black breeds, will never throw thoſe aſide for theſe. They are a ſmall thin-formed animal, with briſtles ſtanding up from noſe to tail, and exceeding bad thrivers. We met with conſiderable herds of them upon the moors in

different

different parts of the Highlands of Scotland, picking up the wild berries, eſpecially about Thurſo, in Caithneſs.

I have ſeen the ſame kind of pigs in different parts of Ireland.

GENERAL

GENERAL REMARKS.

HAVING now, to the beſt of my knowledge, and according to what I propoſed, given an account of thoſe domeſtic animals, in the breeding of which our farmers in particular are ſo deeply intereſted, as well as the kingdom at large, I will beg leave, before I proceed farther, to add a few

GENERAL REMARKS.

In the *firſt* place, then, it would ſeem that the largeſt domeſtic animals are not the beſt, or moſt advantageous, to the breeder or feeder; becauſe we generally

find, that the large big-boned cattle and ſheep require more and better food in proportion, to ſupport and feed them, than thoſe of a middling ſize and ſmall bones; and the larger, bigger boned, and clumſier they are formed, the more unprofitable they are; while, on the contrary, the truer they are formed, and the finer the bone, the more profitable, as they not only take leſs food in proportion, but feed readier.

For I aver, that no large-boned animal will feed ſo quick, or cover ſo readily and thick with fat fleſh, as one with a *ſmall bone*, if well formed. This is the criterion—this is the main principle that we found our judgment upon, reſpecting all animals, which are to be fatted for the ſupport of mankind; and we can juſtly ſay, that this judgment is confirmed by near forty years experience. Notwithſtanding this aſſertion is made with ſome degree of poſitiveneſs, yet we are not unconſcious of its being a *new doctrine*,

trine, to the generality of breeders in this iſland; and, conſequently, will appear ſurpriſing and ſtrange to many old breeders and graziers. But I have not a remaining doubt, if the advocates for large bones will make fair, candid trials, the ſmall bones will win, or gain the prize, nine times out of ten, or rather every time; nay, I am inclined to think, that the ſmall-boned, true-proportioned animal, will pay 4d. while the big-boned one will only pay 3d. for what it eats.—When I aſſert this, I would wiſh to be underſtood, that I mean from the time of calving or lambing, to the time of killing for the market; becauſe, I look upon the grazier, who buys in and feeds, and he that breeds and feeds, as two very different people. It is the latter of thoſe that the public are obliged to for that uſeful obſervation, of ſmall-boned animals excelling large-boned ones in feeding; becauſe, he ſees, watches, and examines the various puſhes and improve-

ments from the beginning to the end; while the grazier, who buys in his ſtock, is eaſy, in a great meaſure, how they are bred, ſo long as they pay him for feeding. A plain, coarſe, ugly animal, may pay him more than a fine well-made one; becauſe he buys the coarſe one at a much leſs price in proportion, and it is of little conſequence to him as an individual: But, to his country, to the community at large, it is a matter of prodigious importance, much more than has in general been thought of; becauſe the more meat, and leſs bone, you can produce from a given quantity of paſturage, turnips, cabbages, &c. the better ſurely, and more mouths you muſt feed.

The beef or mutton is finer grained, and ſells higher by the pound; it is worth more to the conſumer than the other, becauſe it affords more and better fleſh, and leſs bone; and, ſuppoſing the poor are under a neceſſity of buying the coarſe parts, in a dear time; it is worth more

more to them, in proportion, than the coarſe of the large-boned ones; becauſe, though ſtill coarſe, it is finer than the others, and has leſs bone; in fact, it is the cheapeſt and beſt eating to the rich, to the manufacturer, and to the poor.

Even in regard to horſes intended for the draught or ſaddle, thoſe I preſume are the beſt, in general, that are of the trueſt proportion, in reſpect to bone, carcaſe, or form, and of a *middling* ſize. It may be admitted, that the great aukward lumbering horſes, from 16 hands to 18, may be the propereſt for drays or ſtage-waggons, &c. But we know that horſes of this ſize are unfit for the ſaddle, the cart, or the plough; and where one is wanted for the former purpoſes, I ſuppoſe five are wanted for the latter; perhaps from 14 to 16 hands are the moſt ſerviceable; or, to come nearer, I fancy we ſhall find the beſt from 14 hands 2

inches to 15 hands 2 inches;* but perhaps it is not very eaſy to aſcertain this, to any great degree of exactneſs, nor may it be abſolutely neceſſary.

However, this I think we may venture to aſſert, that in thoſe kinds of animals now under conſideration, and perhaps in moſt others, there is a certain ſymmetry, or proportion of parts, which is beſt adapted to a particular ſize in each kind. All thoſe of each kind, that are above this ſize, we find diſproportioned according to the ſize they attain to; and in the degree that they are advanced beyond this line of perfection, we find

* I am glad to find that the *middled ſized* horſes are now become faſhionable; or rather, that reaſon and common-ſenſe have at laſt prevailed over whim and caprice, becauſe, I have obſerved, that at all the horſe-fairs where I have lately been, the dealers now prefer thoſe horſes which are from fifteen hands to fifteen and a half, even for the carriage; and it is amazing to me that this matter ſhould have been ſo long of making its way; however, now it has taken place, and I am perſuaded that it will not eaſily loſe its hold again for the reaſons given n the text.

them

them leſs active, leſs ſtrong in proportion, and always leſs able to endure hardſhip or fatigue. We find all great horſes tire ſooner than middling-ſized ones; they are ſlower in motion, they are more ſubject to diſorders, and, conſequently, wear ſooner out.

In neat cattle or ſheep, we in general find, that the largeſt are the tendereſt, and moſt liable to complaints, that they require more and nicer fare, are ſlower in feeding, and worſe butcher's meat when fed, and that they ſtand Winters, or inclement ſeaſons, much worſe than the well-proportioned ones; therefore it is theſe *well-proportioned handſome animals* that we would recommend to the attention of the breeders, to chooſe both *males* and *females* from, if poſſible, or as near to them as may be. It perhaps has been owing to the idea of largeneſs, or the wiſh to breed the biggeſt, in the different kinds of domeſtic animals, that has ſo long prevented our breeders from ſelect-

ing and diſtinguiſhing the moſt valuable kinds: For, ſo univerſal was this idea, and ſo much were we blinded by it, that we did not perceive which were the moſt valuable animals of each kind. We had no conception of any animal being valuable or *good*, that was not *great*. We could not ſeparate thoſe two ideas of good and great. We did not attend to that ſymmetry and proportion, which ſo eſſentially characterize the valuable kinds of each ſpecies, and which ſeldom, or never, fail of being the hardieſt, and the beſt thrivers. In ſhort, it was left to this age to make thoſe nicer diſtinctions, which conſtitute the able breeder and diſcerning judge; and the more theſe diſtinctions are attended to and examined, the more they will be purſued; in conſequence of which improved notions, our breeders muſt now neceſſarily follow thoſe kinds that are moſt valuable.

Much has been ſaid of late years about ſhort-legged ſtock being the beſt, particularly

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cularly neat cattle and ſheep;—nothing would go down once but ſhort legs. That little, ſhort-legged, dwarfiſh breed of ſheep, ſo much (tho' undeſervedly) run upon a few years ago, are very properly called, by a conſiderable breeder, an acquaintance of mine, "the Gentleman's ſheep;" for, though to thoſe who are not judges, they have a pretty enough appearance, yet they will not bear examining by an attentive and able judge, —I mean him who judges by his fingers as well as his eyes; a method that is out of the Gentleman's line. Theſe originated in Lincolnſhire, but are now almoſt entirely diſuſed, for very good reaſons.

I wiſh to be cautious in contradicting a general notion, or received opinion; but we ſometimes find the moſt prevailing opinions wrong: For inſtance, what we have juſt been obſerving of the largeſt and biggeſt-boned animals not being the beſt, tho' formerly thought ſo,

and

and reſpecting ſhort legs; tho' I admit the propriety in a degree, I would wiſh to caution our breeders againſt the extreme. I would have them recollect the old proverb, that all extremes are wrong; and I would beg leave to obſerve, that the attentive breeders of this day have, I apprehend, made ſome notable and ſenſible diſtinctions, in regard to thoſe animals that muſt be fed, and ſlaughtered for the uſe of mankind, viz. between what they call eſſentials and non-eſſentials. They give the former title to the back and ſides in particular, as well as the whole proportion of the carcaſe, always taking in the inclination to make fat.—The non-eſſentials are the legs, ears, horns, tail, &c. and even wool and hides; for, tho' theſe are valuable in themſelves, yet they are more to be diſpenſed with than the back, ſides, &c.; for, thoſe breeders and graziers, who keep their minds open to conviction, and reaſon coolly, ſay, that they have

ſeen

ſeen good carcaſes, with thick or thin hides, under long, ſhort, coarſe, and fine wool, with long, ſhort, thick or thin horns or ears, &c; but that they never ſaw a good carcaſe without the back broad and ſides round, or without that proportion or ſymmetry in the carcaſe, which we have endeavoured to point out, in our deſcriptions of the bull and ram. Nevertheleſs, I muſt obſerve, that tho' they have given thoſe externals the denomination of *non-eſſentials*, for diſtinction's ſake, they are not to be quite diſregarded; for tho' they are not properly eſſential, yet they are very often ſtrong marks or indications of good or bad thrivers, &c.; as, for inſtance, a thick hide ſeldom covers a quick-feeding carcaſe, or a heavy fleece a ready-feeding or fine-grained caſe of mutton.—Again, fine, ſmall, and ſtraight bones in the legs, and thin hides and pelts, are almoſt certain ſigns of a kindly breed, and fine-grained beef or mutton, &c. Thus we find

find the thick pelts, and heavy wool in Lincolnſhire, cover the coarſeſt-grained mutton that we know of; while a variation of the ſame breed in Leiceſterſhire, highly improved, having conſiderably leſs wool, and very thin pelts, are quicker feeders, and their mutton as fine-grained and ſweet as a mountain ſheep.

Tho' it may ſeem very extraordinary to the careleſs and unobſerving, yet it is a fact well known to the attentive breeder, that in general, all our beſt and moſt valuable kinds of ſtock, are found upon the *middling* and *worſt* grounds, and not upon the *beſt* lands, as we ſhould naturally imagine; and the reaſons that it is ſo, are ſimple and obvious:—Thoſe breeders who occupy the middling and indifferent tracts of country, are under the neceſſity of producing an induſtrious and thriving breed of animals; becauſe a large, tender, big-boned kind, could not ſubſiſt upon their keeping, or the produce raiſed upon ſuch lands;

lands; while the good land makes up for every deficiency, or at leaſt ſo far warps the judgment of the unthinking breeder, that he plumes himſelf upon having ſtock ſuperior to his induſtrious neighbours, while the merit conſiſts in the goodneſs of his land, and the richneſs of its paſturage and produce. Satisfied with his ſtock being the largeſt, he alſo concludes that they are the beſt; while his more active and induſtrious neighbour, from being ſituated in a leſs fertile ſoil, is obliged to ſeek out for a hardy-thriving breed.—And this again makes me recur to the Lincolnſhire breeders, who have ſo long ſtuck to ſuch coarſe unprofitable kinds of ſtock, both cattle and ſheep, the paſturage, in a great part of that county, exceeding any other I am acquainted with in this iſland: For, what other county have we, poſſeſſed of ground, that will, through *Summer*, ſufficiently ſupport *fourteen large ſheep and one ox*, upon *two acres*, and *five ſheep on two*

acres

acres during Winter? I was told by ſome Lincolnſhire farmers, that near to Boſton there are ſome grounds, which maintain 15 *or* 16 *ſheep upon an acre*, all the Summer.

On BEEF and MUTTON.

I will beg leave to make a few remarks *on Beef and mutton expoſed to ſale in pieces on the ſhambles or ſtalls.*—When we conſider, that the difference between what is called the coarſe and fine, or the beſt and worſe parts of beef, when cut up, is not leſs than one hundred per cent. of what vaſt conſequence, then, muſt it be to the breeder, to propagate thoſe cattle that have the greateſt proportion of theſe valuable parts! And, if I am right in what I ſaid before, it will follow, that the ſmall-boned true-proportioned cattle, are the very ſort that produce more fine than coarſe, that lay their fat upon the valuable

valuable parts, and always feed in much leſs time than the big-boned coarſe ſort.

But it is not ſo with mutton; the difference in value between one joint of mutton and another is ſcarce worth naming. In different parts of the kingdom, they give a preference to particular joints; but the variation is ſeldom more than a farthing, or halfpenny per pound at moſt. Nevertheleſs, it is ſtill right for the breeder to purſue that ſpecies which pay moſt for what they eat; and theſe, I apprehend, will always be found to be the ſmall-boned true-formed ſheep, as deſcribed before: For, they not only produce the fineſt-grained mutton, but more of it in a given time, in proportion to offal, than any other ſort of ſheep I know of.—But in ſpeaking of offal here, I would be underſtood, to include more than what the butchers generally do.—By offal, they mean hide and tallow only, in neat cattle; or ſkin and tallow, in ſheep; and ſo on: But by offal in this

place,

place, I would take in, not only hide or ſkin, and tallow, but bones, horns, pelts in ſheep,* blood, guts, and garbage, and even wool and hair. And, however new the idea, I believe it will in general be found, that the truer and finer the form of an animal, the better quality, and greater the quantity of fleſh, when fatted; and, in proportion, not only leſs hide or ſkin, and tallow, but leſs bone, horn, pelt, blood, guts, and garbage, and even wool and hair: And on the contrary, the clumſier and coarſer the form, the fleſh will in general be of a worſe quality, and leſs in quantity, when fatted; and in exact proportion, not only more hide or ſkin, and tallow, but more bone, horn, &c.

Upon this principle, ſuppoſe two bullocks, or two ſheeep, are fatted together;

* There is ſometimes not leſs than 20lb. weight difference, between the pelts of one ſort of ſheep and another, between the fine thin pelt, and the thick coarſe fleſhy one.

on

on the ſame food, the one as remarkable for coarſeneſs as the other for fineneſs, and admitting the coarſe one eats only as much as the other, tho' I have no doubt of his eating more, ſtill a conſiderable part of his food muſt go to the ſupport of more hide or pelt, bones, &c. while the other's food is principally converted into animal fleſh; which fleſh, on an average, call only worth 3d. per lb. I am afraid the horns, bone, pelt, &c. are not worth above a farthing per lb. conſequently a very great loſs to the community. Indeed the hide of a bullock is ſometimes worth as much per lb. as his fleſh; and particularly firm, ſtrong hides, what are generally called leather hides, are worth more, perhaps 6d. per lb.; but then theſe very thick hides almoſt generally cover a very ſlow-feeding carcaſe; and a thick pelt generally covers a coarſe-grained, ſlow-feeding carcaſe of mutton. The pelt itſelf, tho' perhaps from 15lb. to 25lb. weight, (ſome have

been known to weigh 30lb. or more) not worth more than 2d. or 3d.; for the thinner the pelt, the more valuable.

On TALLOW.

It is a well-known fact, to all experienced feeders and graziers, that thoſe animals which lay the fat on quickeſt upon the outſide, have the leaſt within, in proportion; but then they are the very ſort that pay the moſt for keeping; and, conſequently, that ſort that pay the moſt for keeping, tho' they have leſs fat on the inſide, excel thoſe that have more fat within, in exact proportion, as they pay more in a given time for what they eat.—But ſome will ſay the butcher has the moſt profit upon thoſe that tallow beſt, or lay the fat within: I ſay not; becauſe, if you will allow the butcher the ſame profit upon the quick feeders, or thoſe that put the fat on the outſide, he will always buy theſe, becauſe he can

ſell

ſell two joints for one: And ſurely you can better afford to do this to the butcher.—But the fact is, the butcher can always buy theſe lean, lumbering, coarſe animals, that lay little fat without, and much within, for ſo much leſs per ſtone that they afford him a profit. But ſurely this can be no inducement to thoſe that breed and feed; conſequently no excellence, but the contrary.

On FOLDING.

The Folding of Sheep in many parts of this iſland is looked upon as a matter of conſiderable conſequence to the farmer. I confeſs I cannot ſee it in ſo advantageous a light; but as it is a matter I have not experienced in a very great degree, I would be cautious of condemning a practice ſo univerſally uſed in many of the ſheep-breeding counties in this

kingdom.*—However, ſo far as we can go with ſafety, we may venture to make a few obſervations; and theſe obſervations I would wiſh to be underſtood as relating to ſingle farms only, excluſive of any right of commonage, or adjacent open fields, &c.—If your farm is incloſed, or put only into ſhifts, or any other diviſions, it matters not, we muſt ſuppoſe your flocks depaſtured upon ſome part of the farm; for inſtance, ſay the field A, and are folded every night upon B: Now, I think, in proportion as they enrich B, they muſt rob or impoveriſh A; or, if they eat all day upon the field C, and lodge at night in D, it is the ſame thing; and ſo on, wherever they eat and ſleep. Only I will admit it a conveni-

* On re-conſidering this matter, I muſt admit that an advantage ariſes to the occupier, by folding his flock on ſuch parts of his farm as ſtand in need, whether in graſs or plowing, compared with the dung of that flock being ſcattered at random, eſpecially in the Summer, when it is in a great meaſure dried away by the wind and ſun, or eat by inſects.

ence,

ence, and a preſent advantage, that ſuppoſing B fallow, and intended for turnips, &c. while, perhaps, you have not a ſufficiency of manure to ſpread upon it all; in that caſe, folding your ſtore-ſheep upon the fallow, is perhaps getting you a crop of turnips where they might not otherwiſe be had; for well I know, that it is not eaſy to get turnips upon many grounds without manure; and this mode we frequently have practiſed, tho' ſtill it is 'robbing the church to thatch the choir.' But if you have a common or open field near, be doing with all my heart, and rob on; for ſomebody will be doing it for you, if you do it not. However, if the common, open field, &c. be at a conſiderable diſtance, you perhaps loſe as much as you gain; for, marching ſheep to and from their paſture ſeveral miles every day, muſt neceſſarily hurt them much; and if this is to be the caſe, I ſuppoſe the deer-like thin ſheep may be the beſt for this pur-

poſe, as being probably better able to bear the fatigue of travelling day by day. Nevertheleſs, the polled long-woolled ſheep are employed on this ſervice in different parts of this iſland.

The ſheep-breeders upon the Yorkſhire Wolds, fold theſe kind of ſheep on their fallows, in many places, from Lady-day to Michaelmas. Likewiſe, a particular friend of mine, Mr Benjamin Sayle, of Wentbridge, near Doncaſter, folds his ewe-flock upon both graſs and fallow, and travels them about three miles a-day:—And few people, I believe, have ſhewn fatter ſheep than he has; either his ewes when fatted, after having been folded while a breeding flock, or the deſcendents of theſe ewes. It is no uncommon thing for Mr Sayle to ſell his fat ewes in the latter end of May and in June, in Wakefield market, from thirty-ſix to forty ſhillings a-piece, without the wool: And I hope he will excuſe me, when I ſay that this ſame ſpirited breed-

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er has given as high as 120 guineas for the tupping of 40 ewes, by a tup of the Diſhley breed.

I ſhould not have taken the liberty of ſaying ſo much of this reſpectable breeder, and his valuable ſheep; but becauſe I think he has more merit than any other ſheep-breeder I know of, on account of breeding the moſt valuable ſheep, conſidering the land they are bred upon: For every body that knows Wenthill, will admit, that there are very few worſe ſheep-walks in England, where polled ſheep are kept; and thoſe that know it not, will, I am perſuaded, find it ſo on enquiring.

In ſpeaking of the importance of improving the breed of theſe animals we have been treating of, ſome of my friends, in the warmth of their hearts, have been led to ſay, that if thoſe animals were improved everywhere in this iſland to the ſame perfection as we find them in a few hands only, and every

corner of the *improveable* parts of this iſland managed in the ſame ſpirited garden-like manner that we ſee ſome ſmall diſtricts here and there, Great Britain would be made capable of ſupporting three times the number of inhabitants as at preſent. But, without being too ſanguine, ſuppoſe we could ſupport only twice as many; if, inſtead of ten, we could maintain twenty millions of people, only think what an advantage it would be! And that this might be done in time there can be but little doubt.

If to the moſt ſpirited cultivation of the ground, and moſt approved methods of breeding the animals we have been recommending, equal attention was paid to floating, flooding, or watering of graſs grounds in every part of this iſland, wherever the ſituation will admit, perhaps I ſhall not advance too much if I ſay, that there are very few parts of this iſland, that may not, in ſome degree, be benefited by this moſt uſeful

uſeful, though, I am afraid, hitherto little-underſtood improvement, eſpecially in the Northern parts of this kingdom: Many parts might have water conveyed over them, on a very extenſive ſcale, and to very great advantage; for, every little brook or rivulet is capable of being thrown over the adjoining grounds, more or leſs in proportion to their deſcent; the more deſcent, the more land you can overflow.

This matter will, perhaps, appear of greater magnitude than people in general are aware of, the more it is examined; for I apprehend it may be ſaid to lie at the foundation of moſt improvements in agriculture, and to be the *main ſpring* to all the reſt: Becauſe, if manure is accounted the *primum mobile* in huſbandry, (and few people, I believe, will deny the truth of the obſervation) I apprehend it will be found that this ſame watering of the ground is, and may be made, the ſource of more valuable manure than any

any thing elſe I know of. But what renders it ſtill more ineſtimable is, that it draws this manure from materials, which, without this proceſs, would be entirely loſt; becauſe thoſe riches that are productive of ſuch aſtoniſhing effects, (by turning water over land) are conveyed, unobſerved, down thoſe ſtreams to the ſea; and, conſequently, loſt in that vaſt collection of waters. Now, the watering of land in a proper manner, not only raiſes an amazing crop of hay, but Spring-eatage, and lattermath, ediſhes, fog, or foggages, as they are differently called in different parts of this iſland. This hay again, properly conſumed, makes a large annual return in dung or manure, which you can employ to great advantage on ſuch parts of your farm as moſt need it; becauſe your watered meadow requires no other help but repeating the ſame proceſs as often as neceſſary, while it repays your expence and toil in the moſt grateful manner, by

plentiful

plentiful and certain crops of hay, year after year, and, inſtead of being exhauſted, becomes richer, or more productive.

I am well informed, that upon the watered meadows, in Somerſetſhire, they calculate twenty ſhillings per acre upon the Sping-eatage; then grow a ton and a half or two tons of hay upon each acre, beſide the lattermath or after-eatage. The way they reckon is this: An acre will keep eight ewes and lambs, which, at ſixpence per week each couple, is four ſhillings; they eat it five weeks before laying it in for meadow, which makes the twenty ſhillings a decent return; this excluſive of all the reſt.

But in many of the Southern and South-Weſtern counties, they employ water upon their lands to as much advantage as in Somerſetſhire.—At Diſhley, Mr Bakewell has improved a conſiderable tract of poor cold land, beyond any thing I ever ſaw, or could have conceived, by this ſame mode of improvement;

ment;—he has left proof-pieces in different parts of his meadows, in order to convince people of the great importance and utility of this kind of improvement:—Particularly, in one part, he has been at the pains to divide a rood of ground into twenty equal diviſions, viz. two perches in each piece. It is ſo contrived, that they can water the firſt, and leave the ſecond unwatered; or miſs the firſt, and water the ſecond; and ſo on through all the 20 diviſions: By which contrivance, you have the faireſt and moſt unequivocal proofs of the good effect of improving ground by watering. And as Mr Bakewell is ſo kind as to ſhew this experiment to any gentleman, I cannot help thinking it well worth the while of the curious, and thoſe that have leiſure, to viſit this extraordinary place, where they will ſee many things worthy their attention and inſpection, beſide the watering meadows. And thoſe that wiſh to know the art of watering land

without

without going ſo far to ſee it, will do well to read Mr George Boſwell's Treatiſe on the Watering of Meadows, where they will ſee that matter explained in a very ſatisfactory manner.

It is totally out of my way to meddle with political matters; but I hope I ſhall not advance too much when I ſay, that it would perhaps turn to much better account, if, inſtead of planting colonies, and conquering provinces, our Great Folks would turn their attention, not only to the improvement of our fiſheries, but to the cultivation of every acre of improveable land in theſe kingdoms, as well as the improvement of the moſt valuable breeds of animals.—And in order to promote this matter to its greateſt extent, it would be proper to have experimental farms in one or more parts of theſe iſlands, at the expence of Government, with proper ſuperintendants, and ſervants under them, to make every conſiſtent trial in the various walks of

of agriculture, ſo as to aſcertain which are the beſt modes; as well as a breeding farm or farms, under proper regulations, ſo as to aſcertain, by proper trials and compariſons, which are the moſt valuable animals, and beſt worth the attention of farmers and breeders in their different ſituations, in every part of theſe iſlands; becauſe if we put the lands in this iſland into four diviſions, viz. from nothing to five ſhillings per acre, from five to ten ſhillings, from ten to fifteen, and from fifteen to twenty, ſuppoſing whatever is above the laſt rent to be adapted rather to grazing than breeding and cultivation: This being the ſuppoſed caſe, we can only have occaſion for four different ſpecies of neat cattle and ſheep.—But ſome may naturally enough ſay, that there are a variety of ſoils, ſuch as clay and ſand, &c. We will ſay, that they will require five or ſix different ſpecies of ſtock; but if I was to hazard a conjecture, I ſhould incline

cline to think it would be found upon trial that even fewer ſtill will do. But whoever is acquainted with, or has attended to, the varieties of ſtock in this iſland, will find, inſtead of five or ſix ſpecies of neat cattle or ſheep, five or ſix and twenty variations or more of both kinds. Nevertheleſs my intelligent readers will admit, that the ſame kinds of ſtock which will do upon the mountainous and high parts of Scotland, will alſo do upon the mountainous and high parts of Wales and England. Likewiſe, thoſe ſorts which ſuit the lower hills of Scotland and the North of England, will alſo ſuit the leſſer hills in Wales, and, I ſhould imagine, on the Yorkſhire and Lincolnſhire Wolds, as well as the Downs on the South of England: For, I apprehend, Downs and Wolds are only different names for the ſame kind of riſing grounds: And ſurely thoſe ſorts of ſtock which will anſwer the end beſt in the low-lands or plains, in one diſtrict of the iſland,

iſland, will alſo anſwer the end beſt, in ſimilar parts, in every other diſtrict. If this train of reaſoning be juſt, it will neceſſarily follow, that we ſhall have occaſion for a very few variations of ſtock: And what theſe variations ſhould be, I apprehend, attention and application, joined to a few years experience, will alone diſcover.

Of the time the different Domeſtic Animals ſhed their teeth, and the rules for knowing their age.

NEAT Cattle caſt no teeth until turned two years old, when they get two new teeth; at three they get two more, and in every ſucceeding year get two, until five years old, when they are called full-mouthed, though they are not

not properly full-mouthed until ſix years old, becauſe the two corner-teeth, which are the laſt in renewing, are not perfectly up until they are ſix.—It may alſo be worthy of notice, that the firſt wrinkle upon the horn does not take place until three years old, after which they get another circle, or wrinkle, every year, as long as the horn ſtands on, though not always equally diſcernible in all horned cattle; and I am ſorry to ſay, that it is too common for jobbers and cow-dealers to ſcrape, raſp, or file down theſe wrinkles in old cattle, to prevent the age being known, and by that means to deceive and impoſe upon the unwary, ignorant, and unſuſpicious.

A Horſe does not caſt or renew any of his teeth until between two and a half, and three years old, when he caſts two above and two below.* Between three

* Neat Cattle and Sheep have no teeth in the upper-jaw

and a half and four years, he caſts four more, *viz.* two above and two below; and between four and a half and five years old, he caſts the remaining four, which are called the corner-teeth. It is remarkable that the eight firſt teeth which the horſe renews, make all their growth in about 15 days, while the four laſt or corner-teeth take about a year and a half to make their full growth. The four firſt teeth he renews, are called *nippers* or *gatherers*, the next four are called *ſeparaters*, and the four laſt are the corner-teeth, which alſo contain the black mark, by which the dealers can ſo well diſtinguiſh the age of a horſe. And ſome may think that I ought to ſay ſomething of this matter here; but thoſe that want to be acquainted with this doctrine, need only conſult Bartlet, or other books upon Farriery, where they will find it

jaw before, but only in the under-jaw, while the Horſe tribe has both above and below: Indeed the former chew the cud, but the latter do not.

fully

fully explained.—Horſes have alſo four tuſks or tuſhes, (as the dealers call them) which ſtand between the fore-teeth and grinders, and uſually make their appearance when a horſe is about three and a half years old, but are not at their full growth until the horſe be ſix years old.

Sheep in general renew their firſt two teeth from 14 to 16 months old, and afterwards, every year about the ſame time, until they are turned three years old, or rather three-ſhear, to ſpeak technically, when they become full-mouthed; for, though they have eight teeth in the under-jaw before, I believe they only caſt or renew the ſix inſide ones. However, this matter is not perfectly clear, becauſe I find the ſhepherds differ in opinion, ſome thinking they caſt only ſix, others again all the eight fore-teeth.

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Obſervations on the above.

IT may be obſerved, that Sheep renew their firſt teeth ſoon after they are paſt one year old; Neat Cattle, not until they are paſt two; and Horſes, not until they are near three years old. And this is perfectly conſiſtent with the wiſdom of the Great Creator in all his works:—Becauſe, the horſe-tribe live the longeſt, and are evidently meant to bear the greateſt hardſhips: The bull-tribe the next longeſt; and though very uſeful as a beaſt of draught, yet not at all equal to the horſe in firmneſs and hardineſs: And the innocent ſheep live the ſhorteſt time, and increaſe the faſteſt, not being intended as a beaſt of burden or draught, but to feed and clothe the lords of the creation.—I have heard of particular ſheep living to near 20 years old,—thoſe which the mountain-ſhepherds call *guide-ſheep*, *viz.* old wethers kept on purpoſe to

to guide and direct the bleating flocks upon thoſe unfrequented wilds.—I have alſo heard of particular bulls living more than 20 years: And I knew a horſe* live until 47 years. This horſe had a ball lodged in his neck at the battle of Proud Preſton, in the Rebellion of the year 1715, and the ball was extracted when the horſe died in 1758. This horſe was ſuppoſed to be four years old in the year 1715, conſequently would be 47 in the year 1758.

Now, reſpecting the judging of the age of the above animals by the renewing of their teeth,—tho' perhaps the beſt rule we know of, yet I cannot think it is always to be depended on. However, in ſheep, I am very certain we are liable to be miſled by it; and, I apprehend, much depends upon being early or late lambed, well or ill fed, and ſo on. Par-

* The property of Mr Rain, of Snow-hall, near Gainford, in the county of Durham.

ticularly, I have frequently known tups to have what we call four broad or renewed teeth, when by the above rule they ought to have had only two.—A friend of mine, and an eminent breeder, Mr Charge, of Cleaſby, a few years ago, ſhewed a ſhearing tup, at Richmond, in Yorkſhire, for the premium given by the Agriculture Society there, which had ſix broad teeth; in conſequence of which, the judges rejected Mr Charge's tup, (tho' confeſſedly the beſt ſheep) becauſe they believed him to be more than a ſhearing. However, Mr Charge afterwards proved, to the ſatisfaction of the gentlemen, that his tup was no more than a ſhearing.

Of Domeſtic Animals of leſs note.

AS it may be expected from a Treatiſe on Live Stock, or Domeſtic Animals, that beſides Horſes, Neat Cattle, Sheep, and Swine, ſomething ſhould be ſaid on Rabbits, Mules, Aſſes, Goats, Deer, and even Poultry.—For the ſake of method, then, I ſhall beg leave to ſay, that tho' theſe do come under the idea of domeſtic animals, yet I confeſs myſelf ſo little acquainted with their reſpective merits, that it would be very wrong in me to attempt a hiſtory of them. Indeed, as far as I know, few of them are of much importance to farmers in general, tho' in particular ſituations they certainly have their merits, and amongſt the moſt uſeful of theſe are

RABBITS.

Large tracts of poor light ſoils, in many parts of the kingdom, are employed in

Rabbit-warrens, and no doubt may be of great advantage to individuals, as well as to the community at large; for, both the fleſh and fur of theſe little creatures are of conſiderable value. I was told, when in Lincolnſhire, in 1784, that many parts which had formerly been employed or ſtocked with rabbits, and then ploughed for ſome years, were now again converted into rabbit-warrens, from their being convinced, by experience, that theſe little animals made a better return upon thoſe poor light ſoils, than the plough. I have been informed that the fur of the rabbit is now much more valuable than it was ſome years ſince; and the ſkins of the Lincolnſhire rabbits are particularly eſtimable from their being moſtly ſilver-greys,—the down being black, with white hairs thickly interſperſed. The ſkins of this variety ſell for four ſhillings a dozen more than the common ſort. Theſe rabbits were ſold laſt year at 3s. a couple;

ple; which, 30 years ago, ſold for 1s. 4d. a circumſtance that may account for theſe poor ſoils, reverting again from the culture of the plough, to rabbit-warrens. There are various modes of taking rabbits, but the trap or pit-fall is by far the moſt eligible; a deſcription of which I ſhall take the liberty of tranſcribing from Mr Marſhall's Rural Œconomy of Yorkſhire.—The *trap* conſiſts of a large pit or ciſtern, formed within the ground, and covered with a floor, or with one large falling door, with a ſmall trap-door towards its centre, into which the rabbits are led by a narrow muce.

This trap, on its firſt introduction, was ſet moſtly by a hay-ſtack—hay being at that time the chief winter-food of rabbits; or, on the outſide of the warren-wall, where the rabbits were obſerved to ſcratch much in order to make their eſcape. Since the cultivation of turnips as a winter-food for this ſpecies of ſtock has become a practice, the ſituation of the trap has been changed.

Turnips

Turnips being cultivated in an incloſure within the warren, a trap is placed within the wall of this incloſure. For a night or two, the muce is left open, and the trap kept covered, (with a board or triangular rail) in order to give the rabbits the requiſite haunt of the turnips; which, having got, the trap is bared, and the required number taken.

In emptying the ciſtern, the rabbits are *ſorted*; thoſe which are fat and in ſeaſon are ſlaughtered; thoſe which are lean or out of condition, are turned upon the turnips to improve.

At the cloſe of the ſeaſon the bucks and the does are ſorted in a ſimilar way; the bucks are ſlaughtered; the does turned looſe to breed. One male, I underſtand, is conſidered as ſufficient for ſix or ſeven females; and the nearer they can be brought to this proportion, the greater ſtock of young ones may be expected: It being the nature of the males, (*unnatural* as it may appear) to deſtroy their

their young, more eſpecially, perhaps, when their proportional number is too great.

Great precaution is requiſite in the uſe of theſe traps. If too many rabbits be admitted at once, and the ciſtern be kept cloſe covered only for a few hours, ſuffocation and inordinate heat take place, and the carcaſes, at leaſt, are ſpoiled.—Many thouſand carcaſes have been waſted through this means. The traps are therefore watched; and when the required number are caught, the muce is ſtopped, or the trap covered.

Aſſes and Mules

are undoubtedly very hardy creatures, uſeful in many ſituations, and, probably, well worth breeding by thoſe that underſtand them. I remember, ſome years ago, ſeeing a fine Spaniſh Aſs at Beverly, fourteen hands three inches high, kept as

a ſtallion, and covered at no leſs than two guineas a mare.

Theſe poor creatures are abuſed and buffeted on all occaſions, put to the greateſt drudgery and hardſhips, and ſeem to be equally deſpiſed by man and beaſt. It is amazing how patiently they bear with the crueleſt treatment, and drag out a long life, though under unmerciful loads, and moſt barbarous uſage.

Of Goats and Deer

I know very little: But ſuppoſe that the different ſpecies of thoſe animals might be greatly improved, by the ſimple and plain rule of ſelecting the beſt males and beſt females; and breeding from theſe, in preference to the promiſcuous methods, which at preſent, I am told, are too much purſued: And I can have little doubt, but that the beſt veniſon, (as well as the beſt mutton, &c.) will always be found

found in the trueſt form, and along with the ſmalleſt and fineſt bone; and if ſo, how eaſy would it be for a Nobleman or Gentleman to order his game-keeper to chooſe out a few of the beſt males and females prior to the rutting ſeaſon, put them into a fenced place by themſelves, give the young ones a particular mark, to know them from the promiſcuous race! And a few years will determine whether this matter be worthy the attention recommended. I know great ſtreſs is laid upon the paſturage or herbage they feed upon, nor will I deny its effects in a degree; yet I apprehend a right choice of the moſt valuable males and females of any kind whatſoever, properly attended to, bred from, and the produce depaſtured along with the promiſcuous breed, will ſhew a much more conſpicuous effect.

Of the Feathered Tribe

I acknowledge myſelf more ignorant than

than even of the quadrupeds I have laſt noticed. However, if I am rightly informed by people of nice palates, the ſmall-boned, well-proportioned poultry, greatly excel the large-boned, big kind, in taſte, fineneſs of fleſh, and flavour; and if this be the caſe, it would ſeem as though the ſame principle which we have all along endeavoured to eſtabliſh, held good through all the different claſſes of domeſtic animals which ſupply us with food, viz.——*That all animals, of whatever kind, thoſe which have the ſmalleſt, cleaneſt, fineſt bones, are in general the beſt proportioned, and covered with the beſt and fineſt-grained meat. I believe, they are alſo the hardieſt, healthieſt, and moſt inclinable to feed, able to bear the moſt fatigue while living, and worth the moſt per lb. when dead.*

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